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MONEY AND BANKING

BY

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PREFACE

The subject has been discussed with a background of Indian facts. Particularly in regard to the gold exchange standard Indian experience is valuable.

The author acknowledges his indebtedness to League publications, which are the cheapest and the best books on such questions as tariffs, currency and the trade cycle.

There seems little possibility of economic planning on an all-India basis, still it is hoped that the discussion of the financial mechanism of planning in the concluding part of the book will interest the reader.

September, 30th 1946. BRIJ NARAIN.

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MONEY AND BANKING

PART I—THE TRADE CYCLE

CHAPTER I

INDIAN PRICE MOVEMENTS

The theory of money is largely concerned with price changes. Prices are never stable; they are constantly rising and falling. The theory of money is an attempt to understand general movements of prices. These movements may be studied in the short and in the long period.

Price changes are an index to business activity. When prices are falling, there is generally a contraction of trade and business, and gloom pervades the business world. When they cease to fall and begin to rise, at first slowly, and then rapidly, trade revives, employment increases, high profits are made and there is a general sense of prosperity—which may be checked at a point, giving way again to depression and gloom. Thus trade revolves in a cycle.

The upward and downward swings of prices, which characterise a Trade Cycle, cover a period of about 11 years or more or less. But over a period of several decades, in addition to cyclical changes in prices, there is also a secular trend.

1. INDIAN PRICES, 1927—1943

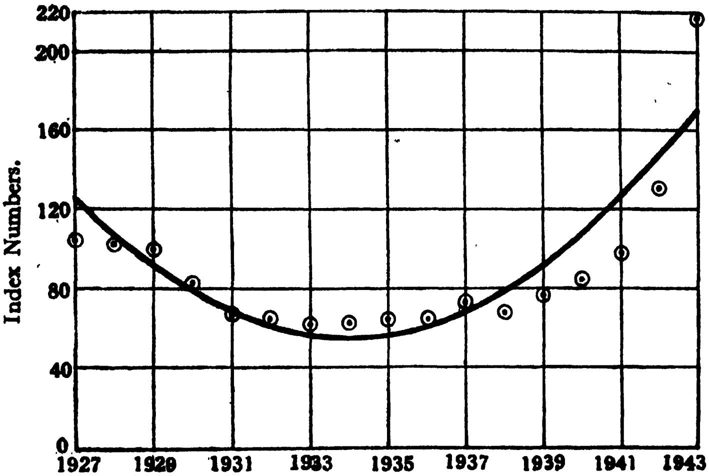
The reader's attention is invited to Chart 1 showing the movement of wholesale prices at Calcutta (1929=100) between 1927 and 1943. From 105 in 1927 the general index number fell to 62 in 1933; it then rose slowly to 72 in 1937, to fall again in 1938. The outbreak of war in 1939 led to a rise of prices throughout the world, but our prices rose more rapidly than prices in the United Kingdom or the United States of America.

The trend of prices during this period was distinctly parabolic and it is satisfactorily brought out by the fitted curve.

The fall of prices in India and other countries after 1929, which persisted for several years, is known as the Great Depression. It initiated a controversy about the causes and control of the Trade Cycle which raged furiously in the nineteen thirties and which has not yet ended.

The League of Nations instructed the Economic and Financial Organisation of the League in October, 1937, to consider the measures that might be employed "for preventing or mitigating economic depressions," and a Delegation was appointed to prepare a report on the subject. The report of the Delegation has been published in two parts. In Part II of the report, entitled *Economic*

CHART 1.



Showing the Index Numbers of Wholesale Prices at Calcutta, from 1927 to 1943, 1929=100. The equation to the fitted curve is:

$$y = 58.17 + 2.873x + 1.417x^2$$

(original in the middle of the series).

Stability in the Post-War World the discussion of "structural factors" is thus introduced:

"The ebb and flow of business, which we now characterize as the business cycle, takes place in a given economic environment of institutions and habits. These tide-like movements appear to be an inherent characteristic of an individualistic economy and to be related to the process of capital accumulation and economic progress under that system. In more primitive societies they find their partial counterpart in lean and fat years, in the alternation of abundance and famine.[1]

The business cycle in industrially developed countries will occupy a great deal of our attention in the following chapters. It is to be distinguished from crises in a purely agricultural economy. Agriculture also revolves in a cycle of good, bad and indifferent years. But this alternation of abundance and famine is due to Nature. It is not a monetary phenomenon. The agricultural cycle is due to factors which have their origin outside the economic system. These factors or causes may be called exogenous. Famines are primarily due to the scarcity or unseasonable character of rainfall, but the distress they cause may be mitigated by human endeavour. In regard to the business cycle, it is generally agreed that "a purely exogenous theory is impossible."[2] A purely endogenous theory, ignoring outside shocks, is also not satisfactory, but the alternation of booms and slumps seems to be inherent in a capitalistic economy ; it seems to have its origin in the very nature of the capitalistic organisation of industry and the credit mechanism which has made its development possible.

---

[1] *Economic stability in the Post-War World,* 1945, p. 25.

2. PRICE OF WHEAT AT DELHI, 1763-1835

Chart 1 gives a picture of our Westernised prices. A totally different price movement is depicted in Chart 2, showing fluctuations in the price of wheat at Delhi from 1763 to 1835. These figures are specially interesting as they were used by W. S. Jevons in an argument connecting commercial crises in England with famines in India.

Price of Wheat at Delhi in Rs. per 1,000 Seers of Wheat.

1763	50	M.C.	1786	23		1809	40		1832	22	
4	35		7	22		1810	25	C.	3	33	
5	27		8	23		1	28		4	40	M.
6	24		9	24		2	44		5	25	
7	23		1790	26		3	43		6	—	C.
8	21		1	33		4	30				
9	24		2	81	M.	5	23	C.			
1770	28		3	54	C.	6	28				
1	33		4	32		7	41				
2	38		5	14		8	39				
3	100	M.C.	6	14		9	42				
4	53		7	15		1820	46				
5	40		8	8		1	38				
6	25		9	17		2	35				
7	17		1800	22		3	33				
8	25		1	23		4	39				
9	33		2	25		5	39	C.			
1780	45		3	65	M.	6	48	M.C.			
1	55		4	48	C.	7	30				
2	91		5	33		8	22				
3	167	M.C.	6	31		9	21				
4	40		7	38		1830	21				
5	25		8	36		1	26				

(W. S. Jevons. 'Investigations in Currency and Finance,' pp. 216-17).

Jevons agreed with Mr. J. C. Ollerenshaw that the secret of good trade in Lancashire was the low price of rice and other grains in India. In the Table given above the letter M indicates the maximum attained by the price and C the year of crisis in England. According to the Table commercial crises in England occurred simultaneously with high prices in Delhi or even before the price attained its maximum level at Delhi. How could the effect precede its cause, if we regard famine in India as a cause, and depression in Lancashire as the effect ? Jevons explains that famines in Northern India followed closely upon the heels of famines in Peninsular India—

---

[2] Ibid, p. 9.

they tended to travel northward from the Madras Presidency, where they occurred earlier. "It must also be allowed," he says, "that the commencement of famine in India precedes by about two years the occurrence of commercial collapse in England."[3]

A famine, by reducing Indian demand for British cotton piece-goods, tended to produce depressed conditions in Lancashire.

Jevons connected good and bad trade with good and bad harvests respectively. In a paper read to the British Association, in 1875 he suggested that "If, then, the English money market is naturally fitted to swing or roll in periods of ten or eleven years, comparatively slight variations in the goodness of harvest repeated at like intervals would suffice to produce those alternations of depression, activity, excitement, and collapse which undoubtedly occur in marked succession."[4]

Jevons also sought to connect variations in crop yields with those in solar radiation, and his argument was later ably supported by his son, H. S. Jevons. The duration of the sun-spot cycle is 11-13 years, but there are also sub-cycles of shorter duration of about 3½ years. The younger Jevons found a 3½-year agricultural cycle agreeing with the 3½-year period in solar radiation, and connected it with trade cycles appearing in 7 or 10½-year periods. Another writer, H. L. Moore, has worked on the assumption of an 8-year agricultural cycle.[5]

The meteorological explanation finds little support among writers on trade fluctuations, and the same may be said about the agricultural theory. Haberler says: "There can be no 'agricultural theory' of the cycle in the sense of an alternative to, say, the monetary theory or the over-investment theory, any more than there can be an 'invention theory' or an 'earthquake theory.' All that can be attempted in this direction is to bring out the importance of agricultural fluctuations as one amongst other potential stimuli in the economic system."[6] Other writers go even further. They view agriculture not as an active but a passive element, which is acted on by influences arising out of the business cycle, but which does not determine them. Agriculture, according to Professor Hansen, is the "foot-ball of business."[7]

Wheat prices at Delhi from 1763 to 1835 show years of very high and very low prices. In the year 1783 the price rose to 167 rupees per 1,000 seers, which was an abnormally high price for those days. In the year 1798 the price was as low as Rs.8, or actually 250 seers were sold for one rupee. Ignoring violent oscillations in either direction, the price was fairly stable over the whole period. The trend is shown by a straight line.

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[3] Jevons, *Loc. cit.* p. 219.

[4] Ibid, p. 185.

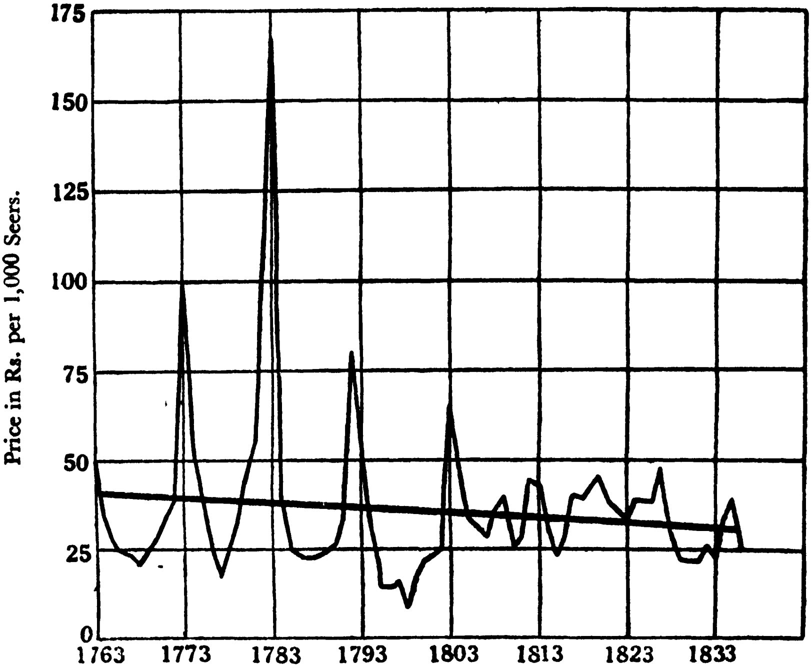
[5] Haberler: "Prosperity and Depression," p. 152.

[6] Ibid, pp. 163-64.

[7] Ibid, p. 154.

The trend is distinctly downward, due to price maxima getting successively lower after 1783.

CHART 2.



Showing the price of wheat at Delhi, in rupees per 1,000 seers, from 1763 to 1835, and the trend. The fitted straight line has the equation

$$y=35.85-0.14x$$

(origin in the middle of the series).

3. PRICE OF WHEAT AT FARRUKHABAD, 1803-1859.[8]

Chart 3 shows the index numbers of the retail price of wheat at Farrukhabad (U.P.), average prices in 1803-12 being equal to 100. There are three famine years, 1817, 1827 and 1838, when the index number rose to 297, 297 and 319 respectively. Apart from these years of famine, separated by 10-11-year intervals, the price was fairly stable. The trend is shown by the fitted straight line with a slightly rising trend.

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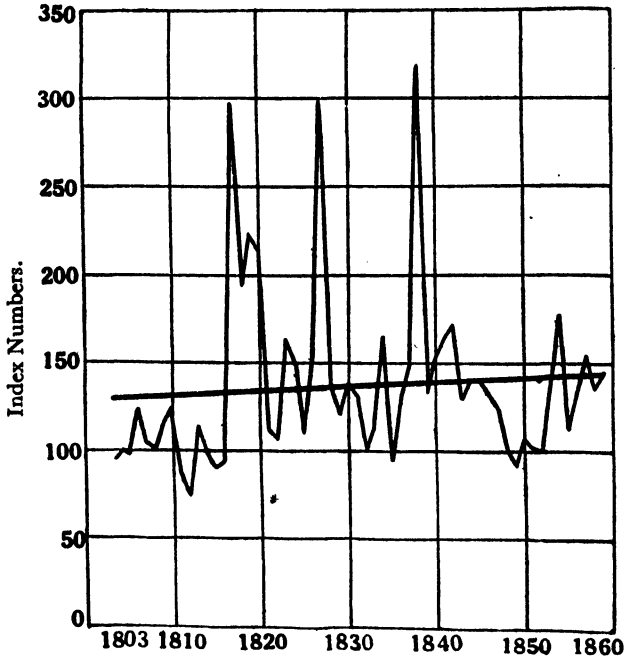
[8] For the data and source see *Indian Economic Life, Past and Present* by Brij Narain (Lahore, 1929), p. 602.

CHART 3.



Showing Index Numbers of the Retail Price of wheat at Farrukhabad (U.P.) from 1803 to 1859, average prices in 1803 – 12 = 100. The equation to the fitted straight line is

$$y = 137.05 + 0.25x$$

(origin in the middle of the series).

4. PRICE OF COARSE RICE IN BENGAL, 1700-1861.[9]

For showing the trend, we have split this series into two parts. From 1700 to 1740 the trend of prices, shown along the axis of Y in seers per rupee, is heavily downward. From 1741 to 1861 the prices, while they rise and fall from year to year, are fairly stable over the whole period.

5. QUINQUENNIAL INDEX NUMBERS OF THE PRICE OF COARSE RICE IN BENGAL, 1700-1922.

Retail prices of food-grains in India, as recorded in Government statistics, are available from the year 1861. Beginning with the year

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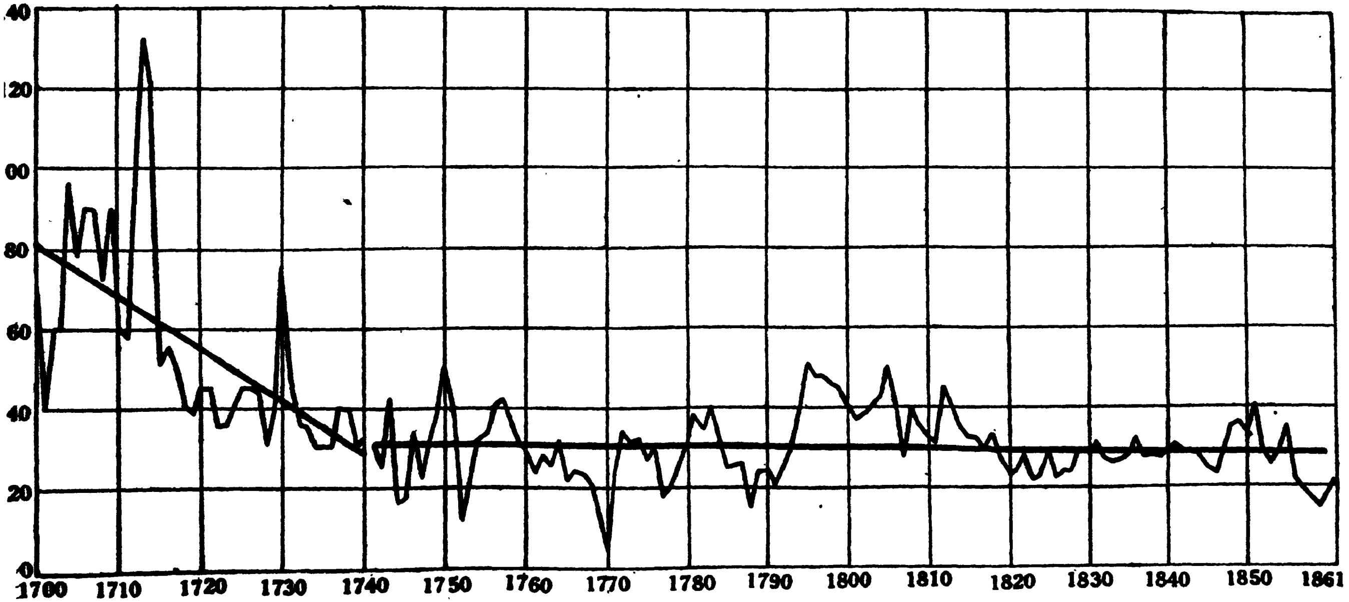
[9] For Data and Source, see Ibid, pp. 100-103.

CHART 4.



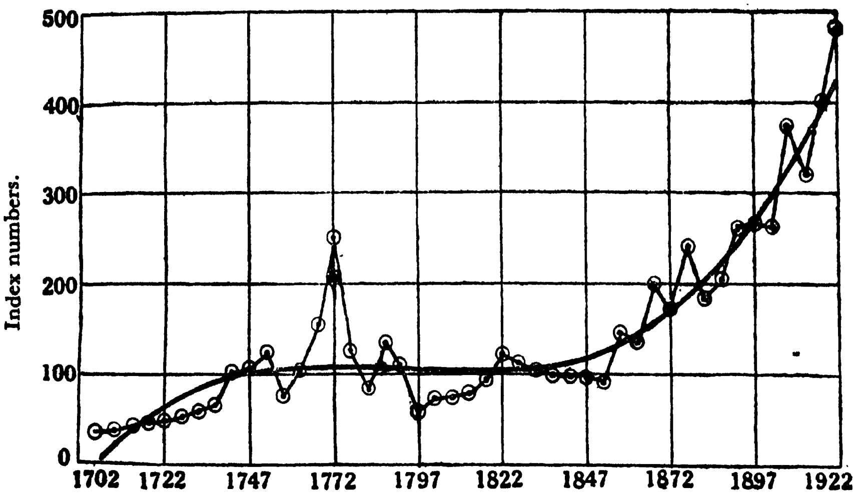
Showing the price in seers per rupee of coarse rice in Bengal from 1700 to 1861. The trend was heavily downwards (signifying a steep rise of price) from 1700 to 1740, and very slightly downwards from 1741 to 1861. The equations to the fitted straight lines are :—

1700—1740 $y=34.94-1{\cdot}31x$. 1741—1861 : $y=29.53-0{\cdot}02x$.

(origin in the middle of both series)

1700 we take five-year averages of the price of coarse rice in Bengal till the year 1922, and construct index numbers with the 10-year period 1781-1790 as the base. Plotting these index numbers on graph paper, we find three distinct trends. First there is a rising trend till 1767, then a long period of comparative stability which lasted till 1837, and thereafter an upward movement which became rapid with the opening of the 20th century.

CHART 5.



Showing quinquennial average index numbers of the price of coarse rice in Bengal from 1700 to 1925, average price in 1781—1790=100.

The equation to the fitted curve is

$$y = 101{\cdot}96 - 0{\cdot}2264x + 0{\cdot}2479x^3 + 0{\cdot}0205x^2$$

(origin in the middle of the series).

6. RETAIL PRICE OF WHEAT IN INDIA, 1861-1940.[10]

The index numbers are shown along the Y-axis. These are index numbers of the Commercial Intelligence Department of the Government of India, 1873 = 100. The annual fluctuations are shown by the broken line, called A. Curve B shows 10-year moving averages (centred). The straight line R T shows the rising trend from 1861 to 1921, and the straight line F T, the falling trend from 1922 to 1940.

The retail price of wheat, after 1861, shows the same course as the prices of 28 exported articles whose index numbers have been constructed by the Commercial Intelligence Department. Prices began to rise slowly after 1861, but they were subject to seasonal influences till about the year 1905. This means that in years of seasonable rainfall they showed a marked downward tendency. It was after the year 1905 that new influences began to operate on the Indian price level. As the Indian Prices Inquiry Committee of 1910 pointed out, " up to 1905 the fluctuations in the prices of food grains and pulses depended largely on the agricultural conditions in India." But a sharp and rapid rise of prices began in 1905 which was not always due to unfavourable agricultural conditions. " Taking India as a whole the agricultural conditions were not seriously adverse either in 1905 or in 1906. Still these years appeared to have ushered in a new period in the history of Indian price-levels, the predominant characteristic of which was the existence of famine prices without famine."[11]

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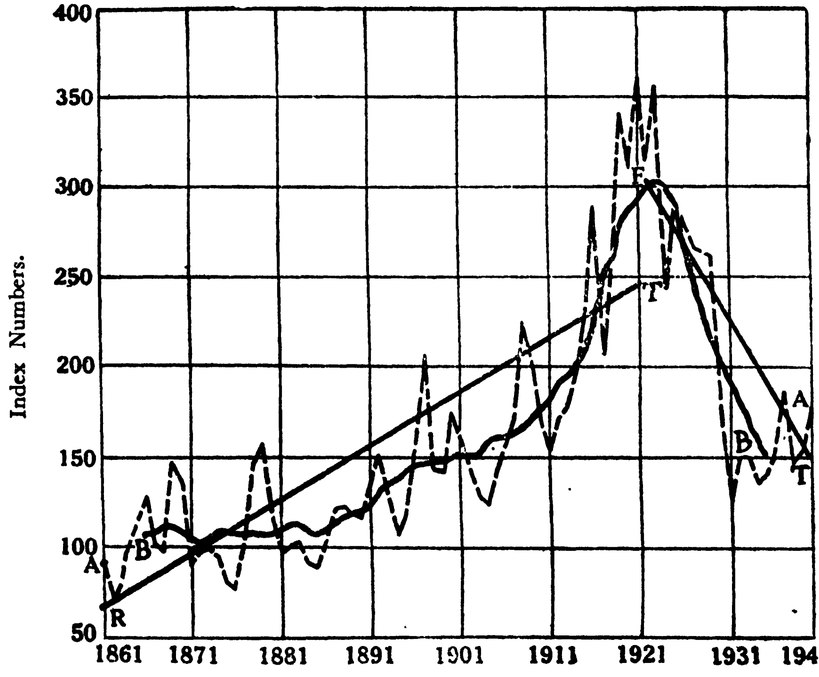
[10] See *Indian Economic Problems*, by Brij Narain, Part I (Lahore, 1944), pp. 174-75.

CHART 6.



Showing Index Numbers of the Retail Price of Wheat in India from 1861 to 1940, 1873=100.

Curve A (broken line) represents actual data, or the annual rise or fall in price.

Curve B (full line) has been obtained by means of 10-year moving averages (centred).

RT ($y=145.4+26x$ shows the rising trend from 1861 to 1921.

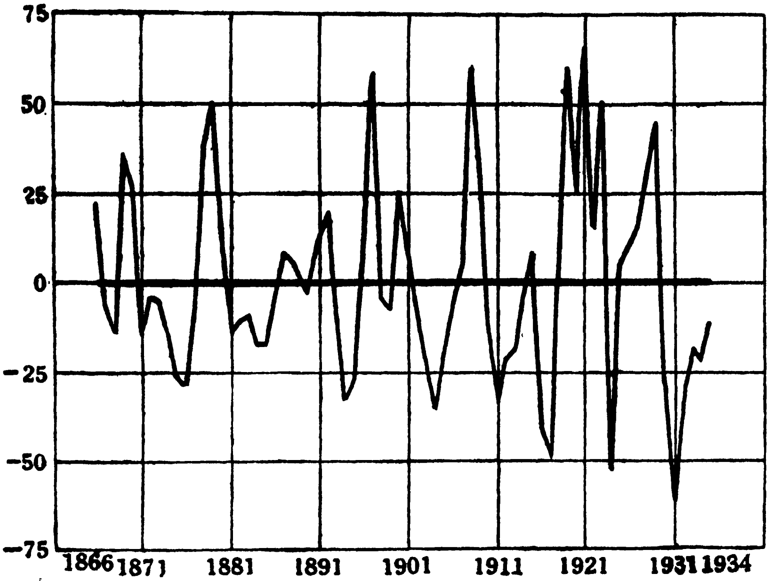
FT ($y=209.6-10.5x$) shows the falling Trend from 1922 to 1940.

---

[11] Report of the Prices Committee, 1914, para. 84.

What had happened was the forging of a powerful link between the Indian and the world price-level. Henceforward price fluctuations in India were to be determined largely by world factors, though causes peculiar to India never ceased to operate. World prices were rising before the out-break of the first world war under the stimulus of increased production of gold and credit expansion rendered possible thereby. Our prices also rose, and even more rapidly than world prices. Then came the war and a further rise of prices, which attained its peak in 1920. Thereafter prices fell. In 1928 the Calcutta index numbers (1914=100) stood at 141. It fell to 87 in 1933.

CHART 7.



Showing Seasonal Fluctuations in the Retail Price of Wheat in India (chart 6), with the trend removed. The curve shows the deviations of price indices, *plus* or *minus*, from the ten-year moving average (centred).

7. NATURE'S CRISES.

Famines recur, but not at regular intervals. At Delhi, the years of maximum price from 1763 to 1835 were: 1763, 1773, 1783, 1792, 1803, 1826, 1834. The first five famines are separated by 9-11 years intervals, but, then, after 1803, the price rose to its maximum in 1826, and again only eight years later in 1834.

At Farrukhabad the clearly marked famine years were: 1827, 1837, 1838, 1861.

After 1838, when wheat sold at 14 seers per rupee, the quantity obtainable for a rupee never fell below 24 seers till the year 1861. The recorded price is 13.9 seers for 1861, 13.9 seers again in 1866, and 13.7 seers in 1869.

The Bengal list shows the following years of scarcity or famine:—

1701, 1719, 1728, 1744-45, 1752, 1769-70, 1777-78, 1783, 1791, 1807, 1823, 1826-28, 1846, 1856, 1866, 1869, 1877-79 and 1902.

Of these famines that of 1769-70 was the worst. It is estimated that one-third of the population of Bengal perished in this famine.

There is no trace of regular periodicity in these figures.

Similarly, when we remove the trend from all-India wheat prices, 1861-1940, the seasonal fluctuations do not produce any regular movement. The period of the agricultural cycle and the amplitude of the fluctuations show considerable variations.

We have also seen that in the study of food prices before 1905, the trend is not of great importance. After 1861, due to railway building and the opening of trade with Western countries, agricultural prices began to rise slowly.

Before 1861, it is only the seasonal fluctuations which attract attention. The trend is scarcely noticeable, except in the case of rice in Bengal between 1700 and 1740. Probably unsettled political conditions in Bengal explain this sharp rise in price.

In this connection it may be pointed out that while India in the past was known as the sink of the precious metals, the hoarding habit prevented the imports of gold and silver from exerting their normal effect upon the level of prices. The life of the people was simple, and their wants few. Writing in 1888 Sir John Strachey said:

> "Almost everything that the people of India desire to meet their simple requirements is produced at home. This is true even of the comparatively rich, to the great majority of whom the wants and luxuries of European life are unknown. It is not so much the general poverty of the people, as the peculiar and slowly changing character of the social and industrial conditions under which they live, that confines within narrow channels these demands for the productions of other countries."[12]

The same is true of India before the advent of the British. Our economy was self-sufficient, and imports consisted of a few articles of luxury, meant for the very rich, and gold and silver, used for ornaments and hoarding. Under such conditions, natural cataclysms alone could cause marked fluctuations of prices. It may be assumed that population tended to increase slowly, and that the growth of production kept pace with the growth of numbers.

Since 1905, however, our prices have shown dominant trends, but subdued seasonal changes.

---

[12] *India, Its Adminirstion and Progress* 1903, p. 191.

8. THE TREND

The reader's attention is again invited to Chart 6 showing annual fluctuations in the retail price of wheat in India from 1861 to 1940 and the trend. The trend was upward till about 1921 and thereafter downward.

How does the upward or the downward trend arise ? Obviously long-period changes in the value of money arise out of short-period changes. If, as prices rise and fall from year to year, the upward movement has longer legs than the downward movement, the trend will be upward. When the upward and downward movements have legs of equal length there will be no trend. This may be more clearly explained with the help of imaginary data.

Let us suppose that the price of an agricultural commodity rises and falls in the manner shown in column 2 of the table given below :—

1	2	3	4	5	6	7
Year.	Index Numbers of prices.	5-year moving average	Supposed trend	Index Numbers of prices with trend added	5-year moving average with trend	Deviation (+) or (−) of prices in col. 5 from moving averages.
1901	110	...	0	110	...	...
1902	115	...	2	117	...	.
1903	130	120	4	134	124	+10
1904	125	120	6	131	126	+ 5
1905	120	120	8	128	128	0
1906	110	120	10	120	130	-10
1907	115	120	12	127	132	- 5
1908	130	120	14	144	134	+10
1909	125	120	16	141	136	+ 5
1910	120	120	18	138	138	0
1911	110	120	20	130	140	—10
1912	115	120	22	137	142	— 5
1913	130	120	24	154	144	+10
1914	125	...	26	151	...	...
1915	120	...	28	148	...	...

The period of the cycle is five years and the cycle exactly repeats itself. Column 3 of the table shows 5-year moving averages.

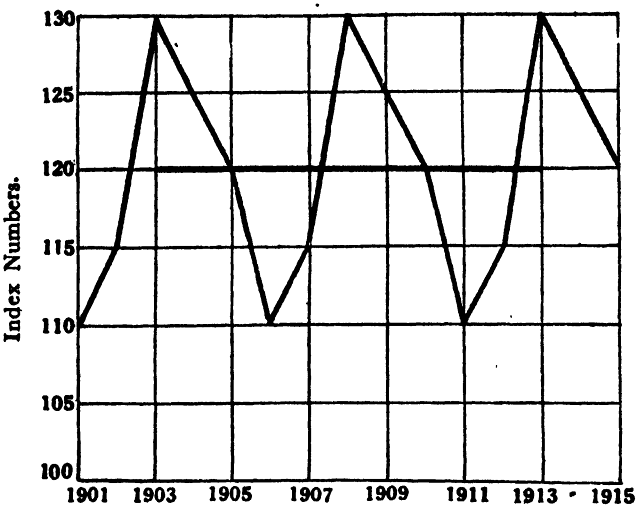
$$\frac{110+115+130+125+120}{5} = 120 :$$

$$\frac{115+130+125+120+110}{5} = 120$$

and so on. Plotting the moving average in the centre of each 5-year period we obtain a straight line without any slope or trend.

Column 4 of the table gives the trend, $y = 2x$. $x = 0$ for 1901, and increases by a unit for each subsequent year. Adding the trend to the index numbers we obtain the figures in Column 5. Column 6

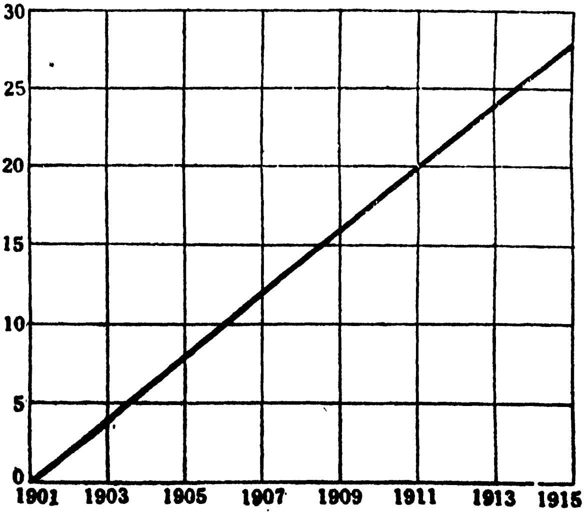
CHART 8.



Showing index numbers of prices and the straight line trend (Table p. 12).

shows the 5-year moving averages of the figures in the preceding column. The moving average eliminates the cycle and re-

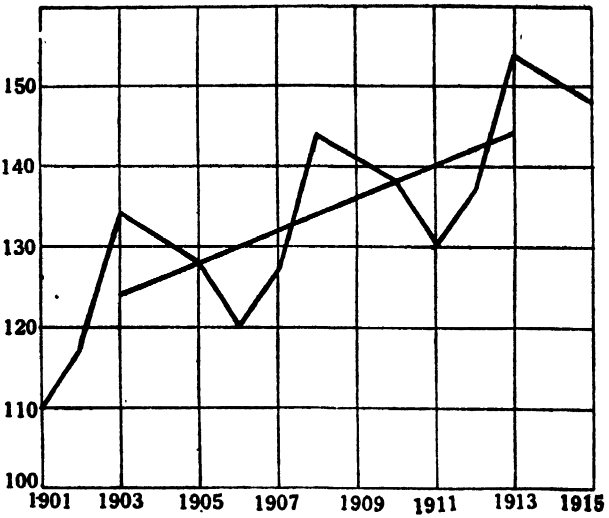
CHART 9.



Showing the Rising Trend
$y=2x$
(Table on p. 12).

veals the straight line trend. The deviations shown in the last column (+) or (−) of prices in the Column 5 from the moving

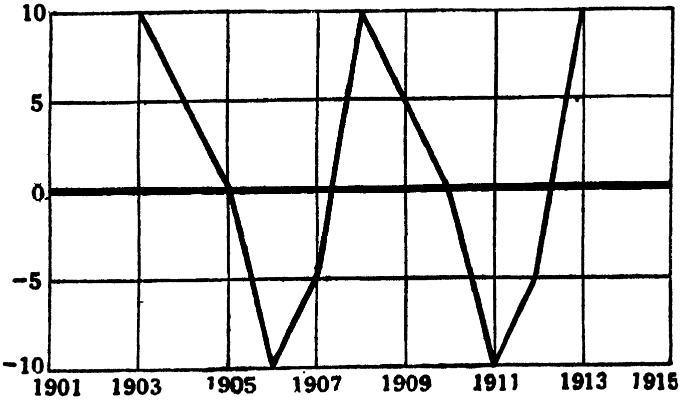
CHART 10.



Showing index numbers of prices with the trend added (Table on p. 12)

averages reproduce the original upward and downward movements of equal extent.

CHART 11.



Showing the seasonal fluctuations, with the trend removed (Table on p. 12)

It should be clear why annual fluctuations of prices may, over a long period, have a distinct trend.

When prices vary in a cycle, and each cycle exactly repeats itself, a moving average with a period equal to that of the cycle will give a straight line without a slope. Cyclical fluctuations are thus entirely eliminated. When prices vary in a cycle rising along a line with a uniform slope, a moving average with a period equal to that of the cycle will eliminate the cycle, and reveal the rising straight lines trend.

The trend may also be revealed by fitting a curve to the data by the method of least squares.

CHAPTER II

THE QUANTITY THEORY AND THE SAVING AND INVESTMENT THEORY

We know the meaning of short-period changes in the value of money. We also know how a price trend arises. A price trend is an upward or downward movement of prices over a period of several generations. It is remarkable that before the era of railways Indian prices, in the cases we have considered, scarcely show a trend. It would have been different if all the gold and silver that we imported in the past, instead of disappearing into hoards, had gone into circulation.

1. SECULAR PRICE MOVEMENTS IN EUROPE

Adam Smith mentions the fall in the value of silver in Europe consequent upon increased production between 1570 and 1640.

" Silver sunk in its real value, or would exchange for a smaller quantity of labour than before ; and corn rose in its nominal price and instead of being commonly sold for about two ounces of silver the quarter or about ten shillings of our present money, came to be sold for six and eight ounces of silver the quarter, or about thirty and forty shillings of our present money."[1]

The stock of gold and silver available as money in Europe in the last years of the 16th century has been estimated at 130,000,000 pounds ; at the end of the 17th century the stock of money had increased to 297,000,000 pounds.

During the 18th century the silver of Mexico was added to the supply of money and the world's net stock of money had increased to 380,000 000 pounds by 1850. Increase in money supply led to a gradual rise of prices in Europe. There was a falling off in the production of the precious metals between 1810 and 1829 and prices tended to fall, but soon after this, gold-bearing sands were found in Siberia, and in 1848-60 gold mines were discovered in Australia aud California. Gold became cheaper relatively to silver and gold prices of commodities rose. Gold production increased until about 1860, when a decline set in, which lasted until 1896. Prices in Europe began to fall in about 1873 ; they continued to fall until 1896, when the increase in the world's output of gold and in the supply of credit money based on gold, led to a general rise of prices. This period of rising prices lasted till the outbreak of the first Great War, when a new period of inflationary rise of prices began.

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[1] *Wealth of Nations* Book I, Chapter XI.

It is clear that over a long period of time, variations in the quantity of money are accompanied by changes in prices. Why is that so ?

2. QUANTITY THEORY OF MONEY

Adam Smith did not discuss the quantity theory of the value of money but Montesquieu wrote in his *Esprit de Lois* :

" Money is the price of merchandise or goods. But how is the price fixed, that is to say, by what fraction of money will the price of each commodity be represented ? If one were to compare the total mass of gold and silver existing in the whole world with the total of existing commodities, it is certain that each particular good or commodity could be compared to a certain fraction of the entire quantity of gold and silver. As the total of the one [money] stands to the total of the other [goods], so does a part of the one stand to a part of the other."[2]

By dividing the total supply of goods by the total supply money we obtain the value or the purchasing power of a unit of money. Assume that wheat is the only commodity and that there are 10,000 units of it in the world. They are exchanged for 20,000 units of money in the form of gold and silver. Then the purchasing power of a unit of money is :

$$\frac{10{,}000 \text{ (goods)}}{20{,}000 \text{ (money)}} = \tfrac{1}{2} \text{ unit of wheat,}$$

and the price of a unit of wheat is 2 units of money.

David Hume regarded it as almost self-evident that the prices of all things were dependent on the relation between money and goods, and that each considerable change in the one or the other either raised or lowered prices. If the quantity of goods increased, they became cheaper ; if the quantity of money increased, the prices of goods rose. Hume also made it clear that prices were determined not so much by the absolute quantities of goods and money, as by the quantity of goods which were brought to the market, and the quantity of money which was in circulation. If money were locked up in chests, then, so far as the effect on prices is concerned, it might as well have been non-existent ; similar would be the result if the goods were not brought to the market but were hoarded in magazines and granaries.[3]

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[2] " L'argent est le prix des merchandises ou denrées. Mais comment se fixera ce prix. c'est-à-dire par quelle portion d'argent chaque chose sera-t-elle representée ? Si l'on compare le masse de l'or et de l'argent, qui est dans le monde avec la somme des merchandises, qui y sont, il est certain qui chaque denrée ou merchandise en particulier pourra être comparée à une certaine portion de la masse entière de l'or et de l'argent. Comme le total de l'une est au total de l'autre, la partie de l'une sera à la partie de l'autre" (Chapter VII).

Ricardo. The reader may be familiar with the dictum that the elasticity of demand for money is unity. For money, says Ricardo, "the demand is exactly proportional to its value" : "If gold were of double the value, half the quantity would perform the same functions in circulation, and if it were of half the value, double the quantity would be required." The quantity of money multiplied by its purchasing power remains constant.[4]

J. S. Mill. Arguing similarly, J. S. Mill has shown that "the value of money, other things being the same, varies inversely as its quantity :—

"If the whole money in circulation was doubled, prices would be doubled. If it was only increased one-fourth, prices would rise one-fourth."[5]

We assume, for this effect, that there is time for the increased supply of money to reach all markets. "But," Mill continues, "the general rise of prices is independent of this diffusng and equalising process. Even if some prices were raised more and others less, the average rise would be one-fourth. This is a necessary consequence of the fact that a fourth more money would have been given for only the same quantity of goods. *General* prices, therefore, would in any case be a fourth higher."[6]

Mill took the rapidity of the circulation of money into account. The quantity of money in circulation, he said, "is equal to the money value of all the goods sold, divided by the number which expresses the rapidity of circulation."[7]

Suppose each unit of money changes hands twice and that the money value of all the goods sold is 10,000. Then $10{,}000/2=500$ is the amount of money in circulation.

3. EQUATION OF EXCHANGE

Taking account of changes in velocity of circulation and of the use of credit money, the quantity theory of the value of money may be thus stated in the form of equation :

$$MV+M'V'=PT$$

Where M and M′ represent the quantity of metallic money (say gold) and credit money respectively, V and V′ are their respective velocities of circulation, T is the number of transactions, and P the average level of prices.

The orthodox quantity theorists insist that when M doubles, P must double.

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[3] David Hume, Essay III "*Of Money.*"

[4] *Works* edited by Maculloch, 1888, p. 114,

[5] *Political Economy*, Vol. II, edition 1862, p. 15.

[6] Ibid, pp. 15-16.

[7] Ibid, pp. 17-18.

The arguments runs as follows :—

The most important form of credit money is .cheque currency or deposits in circulation. Bank reserves are kept in a more or less definite ratio to bank deposits, and individuals, firms and corporations maintain more or less definite ratios between their cash and deposit balances. Convenience and habit thus fix the ratio of cash to credit, or of M to M′. If M′ increases, there is no reason why the ratio of M to M′ should change. The doubling of M, therefore, leads to the doubling of M′, or the ratio of M to M′ remains unaltered.

The velocity of circulation of money and deposits depends on three sets of factors: (*a*) habits of the individual in regard to thrift and hoarding and the use of cheques and book-credit, (*b*) systems of payment in the community, and (*c*) general causes such as density of population and rapidity of transportation. Taking the last group first, money would pass from hand to hand more quickly where means of transportation are rapid than where they are slow, and in a densely populated district than in a sparsely inhabited desert region.

In regard to systems of payment, a change from monthly to weekly payment of wages and salaries would tend to increase the rapidity of circulation of money and deposits. Regularity of payments increases the velocity of circulation; where payments are irregular a larger sum has to be kept on hand.

Finally, hoarding decreases the velocity of circulation; book-credit (*e.g.*,buying fruits from the college fruit-seller on credit, or against an entry in his books) reduces the need for keeping money on hand and increased use of cheques prevents the accumulation of idle hoards.

It is argued that when M increases or decreases, there is no reason why V or V′ should change, for V and V′ are determined by conditions which have nothing to do with the quantity of money in circulation.

Why should the volume of trade change with changes in M? Irving Fisher, the greatest advocate of the quantity theory, says :

" An inflation of the currency cannot increase the product of farms and factories, nor the speed of freight trains or ships. The stream of business depends on natural recources and technical conditions, not on the quantity of money. The whole machinery of production, transportation and sale is a matter of physical capacities and technique, none of which depend on the quantity of money."[8]

If the doubling of M must double M′ and leave V, V′ and T unaffected, it follows 'necessarily and mathematically' that P must double.

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[8] *The Purchasing Power of Money*, p. 55.

4. TRANSITION PERIODS.

Irving Fisher, to whom we are indebted for the equation of exchange explained above, states clearly that "the strictly proportional effect on prices of an increase in M is only the *normal* or *ultimate* effect after transition periods are over[9]." In a period of transition the rate of interest does not rise sufficiently with the rise of prices, so that enterprisers are encouraged to borrow more and more, and M′ increases in a higher proportion than M. V and V′ may also be affected. In fact, when the depreciation of currency is heavy, the velocity of circulation increases enormously and every one wishes to convert depreciated paper money into goods, or to get rid of it on the first opportunity. Rising prices in a period of inflation may thus cause prices to rise ever higher and higher.

Similarly when prices are falling and the rate of interest does not fall sufficiently, enterprisers are discouraged and borrow less, so that credit money or M′ may decrease more heavily than M. The rates of turnover of M and M′ (V and V′) may also be affected, so that falling prices may go on falling.

5. THE QUANTITY THEORY AND THE TRADE CYCLE

Price changes in a trade cycle are an illustration of what happens in the "transition periods" mentioned above. The trend of prices over long periods may be regarded as the "normal" result of changes in the quantity of money, though this result is never in strict proportion to the change in the quantity of money. Over a long period, changes in the quantity of money may be viewed as a cause and prices as the effect. In a trade cycle, on the other hand, the role of the quantity of money is only of secondary importance. The emphasis shifts from the quantity of money to the velocity of circulation. In the upward phase of the trade cycle V tends to increase, so that the rise of prices is greater in proportion to the increase in the quantity of money; when the downward swing begins, the fall of prices is greater in proportion to the contraction of circulation. In fact it has been often seen that at the bottom of a slump there is a plethora of money but prices do not rise. This is because V has gone down.

6. THE CAMBRIDGE EQUATION

In view of the importance of changes in the velocity of circulation during a trade cycle the equation of exchange has been re-stated in a form different from Irving Fisher's. This has been done also to bring the discussion of the value of money into line with the discussion of value in general. Value is governed by supply and demand; supply and demand, it is argued, also determine the value of money.

In Fisher's equation, demand for money is represented by T, the number of transactions. Money is not wanted for its own sake but only as a medium of exchange – or the demand for money is indirect. Money has been likened to a railway ticket. No one buys a railway ticket for holding it, but only as a means of reaching his or her destination.

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[9] Ibid, p. 159.

But money may be and is held. All of us try to keep some money on hand. The demand for money thus kept on hand is a direct demand. It may be related to V of Fisher's equation. When more money is kept on hand or held, V falls; when less money is held, V rises.

Let us call the real income of a commodity R and K the proportion of R held in the form of money. Let M be the number of units of money. Then the value of money per unit is $\frac{KR}{M}$.

Suppose R=1000 maunds of wheat, K=$\frac{1}{2}$; and M=5,000 rupees. Then the value or the purchasing power of a rupee=

$$\frac{1000 \times \frac{1}{2}}{5000} = \frac{1}{10} \text{ maund of wheat.}$$

The value of money varies inversely with prices, so that $p = \frac{M}{KR} = \frac{5000}{1000 \times \frac{1}{2}} = 10$ Rs. per maund of wheat.

We have in this illustration taken K=$\frac{1}{2}$. K may be more or less than this fraction. But suppose a wage-earner receives Rs.7 per week as wages. He spends a rupee per day, so that on the 7th day, he is left with 1 rupee. What is the average amount of money held by him?

$$\frac{6 + 5 + 4 + 3 + 2 + 1}{6} = \frac{21}{6} = 3\tfrac{1}{2},$$

which is half of his weekly wages.

K is never constant. It rises and falls. When it rises, R and M remaining unchanged, the value of money will rise, or prices will fall. When K falls, prices go up.

Suppose that in the illustration given above K is $\frac{1}{4}$. Then $p = \frac{5000}{250} = 20$ Rs. per maund. If K were to rise to $\frac{3}{4}$, p would be equal to $\frac{5000}{250}$ or Rs.6 $\frac{2}{3}$ per maund.

K of our new equation, it will be seen, is the opposite of V of Fisher's equation. When K rises, V falls, and *vice versa*.

7. SAVINGS AND INVESTMENT

In the equation

$$p = \frac{M}{KR}$$

we are not concerned with the relation between the total supply of money and the total number of transactions. R, as we have said above, is the real income of the community, which means goods consumed; goods which are not consumed, but re-sold, are excluded. Thus p of this equation is not P of the equation

$$MV = PT,$$

just as R is not T.

For the study of the phenomena of the trade cycle we have to fix our attention on K, the proportion of the community's real income which is held. In a boom K falls and in a depression K rises.

The rise and fall of K is determined by the relation of savings to investment. We are no longer concerned with the total quantity of money in relation to the total number of transactions, but with that portion of their income which people do not spend on consumers' goods but save, how savings are turned into capital, and the rate of interest which directs the flow of investment, or the process of capital formation.

Goods may be divided into two broad categories, consumption goods and investment goods. Examples of investment goods are machines and all instrumental goods which are used as aids to production. Investment goods are durable goods, including such durable goods as houses. Examples of consumption goods are bread, butter, fruits.

A part of income is consumed and the remainder saved. What is saved is not necessarily invested. I may hoard my savings in the form of cash. Savings in this form are of no use to the community as a whole; they make no addition to the community's income. But when savings are turned into investment goods, they add to the supply of consumption goods.

In advanced communities individual ~~hoarding of cash~~ is insignificant. Savings are entrusted to banks and other financial institutions, which lend them to business people. Cash buried in the ground is money withdrawn from circulation. When the same cash is handed over to banks for safe custody, a very large proportion of it goes back into circulation and helps to create productive enterprises directly and indirectly.

Investment can exceed savings because banks create credit. Loans create deposits and, theoretically, any banker may swell his deposits indefinitely by granting more and more loans. But there are limits both for individual bankers and the banking system as a whole in the creation of deposits which cannot be exceeded without risk of loss and ultimate crash.

Assume now that a community's income in a year is Rs. 10,000 of which Rs. 1,000 is saved. This saving represents potential purchasing power. If it is balanced by an equal amount of investment, the addition to the supply of consumers' goods on account of the investment will enable the increased demand for consumers' goods, represented by the saving, to be met in the future.

8. WHEN SAVINGS EXCEED INVESTMENT

Next suppose that saving increases to Rs. 2,000 out of an income of Rs. 10,000. The result is an immediate reduction in the demand for consumption goods. Will investment increase to Rs. 2,000? It is by no means necessary that it should, for those who save are not necessarily those who engage in productive enterprises, and it is the latter who employ, partly their own, but very largely other people's savings to build more factories, machines and tools and other apparatus of production. An increase of savings, by reducing the demand for consumption goods, would react on investment goods industries also. The demand for goods in general will contract, producing unemployment and loss of purchasing power, which would tend to reduce demand further. Prices will show a downward tendency, and this is the beginning of the downward swing of the Trade Cycle.

We assumed an increase of savings, while investment remained unchanged. The result would be the same if savings remained unchanged, but investment declined.

9. WHEN INVESTMENT EXCEEDS SAVINGS

When there is excess of investment over savings, the reverse process begins. The demand for durable goods increases and industries producing durable goods absorb more and more labour. Assume that at the commencement of the process there were large quantities of unemployed factors in existence. There may be no or very little rise of prices as the investment goods industries expand. But as soon as conditions of full employment are reached, rival producers will begin to compete for additional supplies of raw materials and labour and, by bidding against one another, push up the prices of factors of production. The first stage, when unemployed resources are brought into use, is called *Reflation.* The next stage is that of *Inflation.* An inflationary position created thus cannot continue indefinitely. The rise in the prices of factors of production increases cost and reduces profit. Even assuming an elastic money supply, ultimately the process must end—just because factors of production are scarce. But very often the brake is applied by bankers. They charge higher prices for accommodation. They recall some loans, and are less willing to make fresh advances. The upward swing is not only checked, but turned into a downward saving.

The Quantity Theory of Money may be invoked to explain the beginning, the continuance and also the reversal of the upward swing. For easy money conditions invariably accompany recovery, and the stiffening of money rates, or credit restriction, marks the end of a process of expanding business activity. But, as has been pointed out above, the quantity theory cannot account for the slump at its worst. There is then less money in circulation, but the decrease in circulation is not the cause of the slump but the result of it—in other words, the Trade Cycle is the causative factor, and the price-level is the effect.

Crowther says: "The relationship between savings and investment governs the short-period fluctuations of employment and prices. If savings are in excess of investment then prices will tend to slump below their equilibrium level. If savings are less than investment, prices will tend to rise above their equilibrium level. But the equilibrium level itself is at least partly determined by the quantity of money in existence. The Quantity Theory of Money explains, as it were, the average level of the sea, the Savings and Investment Theory explains the violence of the tides."[10]

10. KEYNES'S EXPLANATION OF PRICE INSTABILITY

There is price stability in a condition of equilibrium, and equilibrium requires that "Q_1, Q_2, and Q should all be zero."* Q_1 is the amount of enterpreneur's profit on the production and sale of consumption goods, Q_2 the corresponding profit on investment or capital goods, and Q the total profit.

Profit is to be understood as excluding the normal remuneration of enterpreneurs. When it is positive it is the sum accruing to them over and above their normal remuneration. When the gains of enterpreneurs are less than their normal remuneration, profit is negative. When profits are zero, the entrepreneurs are earning just their normal remuneration, nothing more and nothing less. The condition of zero profits is realised when saving is equal to investment, or when the market rate of interest is equal to the "natural rate."

Richard Reich, Professor, University of Vienna and President of the Austrian National Bank, has very clearly described the effect on entrepreneurs of a rise in the market rate of interest above, and of its fall below the natural rate of interest. "The more the rates of interest approach the expected profit from production, the less is the stimulus to undertake these processes of production. In no case should the rate of interest rise above the 'natural rate' of interest of the country, for in such cases the entrepreneurs must suffer losses by engaging in production." It would also be a mistake to keep the market rate of interest permanently below the natural rate. In fact, Professor Reich insists, "it is not so much a too high has a too low rate of interest which is a source of danger for economic progress—it leads with a certainty to an economic crisis."†

A rate of interest, much lower than the "natural" rate, leads with a certainty to an economic crisis, as the resulting expansion of productive activity cannot, by the very nature of things, continue indefinitely. The reason has been explained above: factors of production are scarce.

11. THE RATE OF INTEREST.—FISHER

It will appear that the rate of interest at which entrepreneurs are able to obtain accommodation from banks is of the greatest importance in determining the ebb and flow of business activity.

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[10] *An Outline of Money*, p. 159.

* *A Tre* [illegible] *Money*, Vol. I p. 151.

† *Wir* [illegible] *der Gegenwart*, Vol. 2. p. 336.

Irving Fisher admits that in transition periods, changes in the quantity of money fail to produce a proportionate effect on prices. The explanation of this failure, as we have seen, lies in the behaviour of the rate of interest (the money rate). When prices are rising, the rate of interest does not rise sufficiently, with the result that profits increase rapidly, encouraging entrepreneurs to borrow more and more.

The adjustment of the rate of interest to falling prices is also inadequate. When prices were rising, borrowers could afford to pay higher rates of interest and still make high profits. When prices fall, money profits fall with them. Borrowers cannot afford to pay the old rates of interest without suffering losses. They borrow less and a process of contraction, even liquidation, begins.

The inadequate adjustment of the rate of interest to prices, according to Fisher is due to lack of foresight on the part of bankers. He says:

"Only a few persons have the faculty of always 'coming out where they look.' Now it is precisely these persons who largely make up the borrowing class. Just because of their superior foresight, there is delegated to them the management of capital, they become 'captains of industry.' It, therefore, happens that when prices are rising, borrowers are more apt to see it than lenders. Hence, while the borrower is willing to pay a higher interest than before, lenders are willing to loan for the same interests as before."[11]

When prices are falling, lenders, again due to their imperfect foresight, do not sufficiently lower the rate of interest with the consequence that borrowers borrow less, and trade languishes.

Three factors govern the variations in the rate of interest:—(1) thrift, foresight, self-control and love of offspring; their development would tend to lower the rate of interest; (2) the progress of invention, which tends to raise the rate of interest; and (3) changes in the purchasing power of money, which initiate trade cycles on account of the inadequate adjustment of the rate of interest to the appreciation and depreciation of money.

12. THE NATURAL RATE OF INTEREST

The "Natural" or "real" rate of interest which has been mentioned above is to be distinguished from the money rate. The "natural" rate of interest was introduced into the discussion of price changes by the talented Swedish economist Knut Wicksell, whose work "Interest and Price" (*Geldzins und Guterpreise*) was first published in 1898. Wicksell has exercised a profound influence on the development of a theory of "monetary equilibrium," and his views deserve notice.

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[11] *The Rate of Interest*, p. 286.

The cause of economic disequilibrium and crises, according to Wicksell, is to be sought in the lack of adjustment of money rates to the natural rate of interest. What is the natural rate of interest? He says: "There is a certain rate of interest on loans which is neutral in respect to commodity prices, and tends neither to raise nor to lower them. This is necessarily the same as the rate of interest which would be determined by supply and demand if no use were made of money and all lending were effected in the form of real capital goods."[12]

Wicksell is obviously thinking of the rate of interest in a barter economy. Not very long ago loans in our villages were made not in money but in kind, *i.e.*, in the form of seed, food-stuffs, etc. When the crops were harvested the loans were repaid in kind. If the element of risk, which varies greatly in the case of different borrowers, were ignored, it might be assumed that, as a result of competition among borrowers on the one side and lenders on the other, a "natural rate" of interest in terms of physical productivity, determined by the supply of and the demand for "real capital," would emerge. As a matter of fact, there is not, and there never was a single rate of interest in our villages. It would be a matter of no small difficulty to disentangle a "natural rate" from the multiplicity of actual rates in a barter economy.

13. LIMITING AMOUNT OF THE NATURAL RATE OF INTEREST

There is a limiting amount of the natural rate. This is defined as "the amount by which the total product (or its equivalent in other commodities) exceeds the sum of the wages, rents, etc., that have to be paid out."[13] The magnitude of the excess would naturally depend on the productivity of the business on the one hand and on the level of wages and rents on the other. No entrepreneur can pay more than this limiting amount. But the money rate demanded by lenders may be lower. The entrepreneur then makes a profit. Profit is thus above the zero level. Economic equilibrium is disturbed. If prices remain unchanged, the entrepreneur is encouraged to borrow more and more, and the number of entrepreneurs will increase abnormally. "As a consequence, the demand for services, raw materials, and goods in general will be increased and the prices of commodities must rise."[14]

If the money rate were above the natural rate, the reverse situation would be created.

Unfortunately, no means exist of ascertaining exactly what is the natural rate of interest at any particular time. The money rate must therefore lie sometimes above and sometimes below the natural rate. An exact coincidence of money and natural rates of interest is unlikely, says Wicksell. Further, changes in the (average) natural rate may be presumed to be continuous, while the money rate of interest, as regulated by a Central Bank, changes by discontinuous jumps of ½ or 1 per cent.

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[12] *Interest and Price*, p. 102.
[13] Ibid, p. 103.
[14] Ibid, p. 106.

No statistics of the natural rate of interest are available, but, over a long period, we may judge its trend from the movement of the money rate, *e.g.*, banks' discount rates. This is not an entirely satisfactory procedure, for what we really want to know is the extent of the divergence between the money rate and the natural rate, and for that we have no data to guide us.

It should not be forgotten that the natural rate is interpreted in terms of the physical productivity of capital, which must vary from industry to industry, and from business to business. It is an ideal rate having no actual existence.

But it is possible to calculate the yield of real capital in any individual business. This may be done on the basis of revenues and costs realised during a given period which has ended (calculation *ex post*), or the calculation may be based on "discounted anticipations," which means the expected profitability of an undertaking (calculation *ex ante*). The latter only is of practical significance.

14. EFFECT OF DISCREPANCY BETWEEN SAVINGS AND INVESTMENT

Let us suppose that savings has increased. Therefore free capital disposal has increased. But that does not mean that real investment has been stimulated. On the contrary, real investment will be discouraged. Why? Increased savings lead to decreased demand for consumption goods, which would tend to lower their prices. "This fall in prices," says Gunnar Myrdal, "must itself tend to lower capital values by influencing anticipations; with the consequence that the profit margin will move in the negative direction, which naturally means that real investments will decline. Equilibrium on the capital market is, therefore, disturbed not only by an increase in free capital disposal but also by a simultaneous decrease of real investment."[15]

Increased savings thus bring about a "downward Wicksellian process."

Decreased savings will induce a movement of the profit margin in the positive direction and lead to an increase in real investment, and thus to an upward Wicksellian process.

15. THE STRATEGIC ROLE OF INVESTMENT

Investment occupies a strategic role in all measures designed to control the Trade Cycle. This is because of the Acceleration Principle, which may be thus stated: "Changes in the demand for and production of finished goods and services tend to give rise to much greater changes in the demand for and production of producers' goods which are used in their production."

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[15] *Monetary equilibrium*, pp. 106-07.

Consumption expenditure on the necessities of life does not vary much and measures of social provision such as unemployment insurance and old age pensions exert a stabilising influence on it.

Consumption expenditure on durable and luxury goods (motor cars, furniture, radio sets) in prosperous countries is a destabilizing influence. It rises sharply in booms and contracts heavily in depressions. While consumption expenditure on non-durable goods plays a passive role in a trade cycle, that on durable consumers' goods " plays a more active role analogous to that of investment."[16]

Investment goods are producers' goods. Expenditure on producers' goods undergoes the most violent fluctuations with changes in the demand for consumers' goods. This may be shown by an example.

Suppose an increase of 1 per cent in the demand for a consumer's good, say, shirts, would be met by building 100 new machines each year. Then if the demand increased by 2 per cent, 200 new machines would have to be built each year. An increase of 1 per cent in the rate of increase of demand would double the demand for machines. Conversely, if the rate of increase became 1 per cent again, the building of new machines should drop from 200 to 100 by way of adjustment.

In the case of durable consumption goods, *e.g.*, motor cars, quite a small change in the total demand for their services may represent a very large change in the demand for new durable goods.

16. REPLACEMENT DEMAND FOR CAPITAL GOODS

Capital goods wear out and require to be replaced. Suppose we take machines used in making shoes. The value of the yearly output of shoes may be assumed to be 100, and the original and replacement cost of the fixed capital equipment required for this output may be taken as 500, 10 per cent of which mustbe replaced each year. Under these assumptions, new machines at the cost of 50 must be constructed each year for replacement. Suppose the demand for shoes increases by 10 per cent or from 100 to 110. To meet it (other things being equal) the total production of machines must increase from 50 to 100. Thus an increase of 10 per cent in the demand for and production of finished goods necessitates an increase of 100 per cent in the annual production of equipment. If the increase in demand slowed down from 10 per cent to 5 per cent, the demand for machines will fall to 75 (50 for replacement and 25 for additional machines).

We assumed above that each machine lasted for 10 years. If each machine lasted for 20 years, the replacement demand in the case of a stock of 500 would be only 25 per year. If now there was a 10 per cent increase in the demand for shoes, the total production of machines would rise sharply from 25 to 75—a threefold increase.

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[16] *Prosperity and Depression*, by Haberler, p. 88.

Fluctuations in Investment. A statistical study of production in the United States of America during the period 1921-38 shows wide variations in the extent of fluctuations in the output of durable goods on the one hand, and that of perishable goods and services on the other :

Components of National output of U.S.A.
1921-1938[17]

		Mean annual deviation from average. 1921-38 (Million dollars)	Percentage of average.
Consumers' non-durable Goods and Services	...	6,008	10.7
Consumers' Durable Goods	...	1.648	23.5
Residential Construction	...	1,491	56.9
Business Construction	...	1,105	39.2
Public Construction	...	484	19.7
Producers' Durable Goods	...	1,168	24.8

Non-durable consumers' goods and services accounted, on the average, for about three quarters of the value of gross national output, but the percentage deviation from average value of the output for the whole period in their case was only 10.7. Durable goods and construction showed much larger deviations.

It is clear that fluctuations in investment play a role of the greatest importance in creating employment or unemployment. "With a given relationship of consumption to income, the level of employment will depend on the amount of investment being undertaken."[18]

Two kinds of net investment may be distinguished, investment following an increased demand for consumption goods, and investment which is the result of " dynamic factors" *e g.*, inventions, the opening up of new territories, the discoveries of new resources. The latter is independent of changes in consumers' demands, and takes place by jerks.

Another factor contributing to instability is the holding of stocks above normal requirements for speculative purposes. Where large profits are expected on account of a rise of prices, the cost of keeping stocks becomes relatively insignificant. It has been estimated that in the 1919-20 boom in the United Kingdom, while the relevant short-term money rates at no time exceeded 7 per cent, an interest rate of 45 per cent per annum, less the percentage costs of handling and storage, would have been required to make the holding of stocks on borrowed money unprofitable.

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[17] ' Economic Stability in the Post-War World,' p. 54.

[18] Ibid, p. 57.

17. INDEX NUMBERS OF INDUSTRIAL PRODUCTION. U.S.A. 1929-44

The wide variations in the output of investment goods and consumption goods in the United States are well brought out by the following table of index numbers (League Statistics, 1942-44. Table 91).

INDUSTRIAL PRODUCTION OF U. S. A.

	Investment Goods	Consumption Goods
1929	100	100
1930	74	90
1931	51	85
1932	31	75
1933	41	85
1934	49	87
1935	63	97
1936	82	100
1937	92	114
1938	59	102
1939	83	117
1940	105	124
1941	152	153
1942	211	170
1943	273	189
1944	267	184

It will be noted that in the worst year of the depression, 1932, the production of investment goods, as compared with 1929, contracted by no less than 69 per cent while that of consumption goods suffered a fall of only 25 per cent. There was, again, in the case of investment goods, a heavy fall in 1938 as compared with the preceding year, a fall of 36 per cent while consumption goods showed a contraction of about 10 per cent. These figures again emphasize the strategic role of investment in the Trade Cycle.

Our discussion of saving and investment follows, in the main, the treatment of Wicksell and his followers in which saving and investment are not identical.

In his *Treatise on Money* Keynes recognised the possibility of excess of saving over investment, and of the excess of investment over saving. When saving exceeded investment, entrepreneurs suffered losses, and when investment exceeded saving, they made profits. Keynes abandoned this terminology in his *General Theory of Employment, Interest and Money*. In this later book he assumed an identity of saving and investment :[19]

$$\begin{aligned} \text{Income} &= \text{volume of output} \\ &= \text{consumption} + \text{investment}. \\ \text{Therefore investment} &= \text{income} - \text{consumption}. \\ \text{Saving} &= \text{income} - \text{consumption} \\ \text{Therefore saving} &= \text{investment}. \end{aligned}$$

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[19] *General Theory*, p. 63.

Haberler has criticised the indentity of saving and investment.[20]

Suppose a new investment is financed by " inflation " instead of by " voluntary saving." By " inflation " in this connection we mean the creation of new money either by banks or the State. If saving and investment are identical, there must be savings somewhere corresponding to the new investment. " Where are they " ? asks Haberler.[21] The most surprising and unconvincing answers have been given to this question. Mr. Harrod has said : 'For a few days, the whole of the new net investment may be financed by those who receive the money ; before they begin to spend that money, they save what they receive ." Thus the savings were provided by the workers who received the money, let us say, on a Saturday and did not begin spending it till the following Monday ! In this sense all capital enterprises are financed not by those who provide the money but by wage-earners !

In the case of deflation, again, saving and investment can be equated only by making equally absurd suppositions. In a deflation saving exceeds investment, or some people save part of their income which is kept in liquid form. In such a case, it may be argued that goods which would otherwise have been sold, remain unsold. These goods constitute the investment corresponding to the new saving !

The identity of saving and investment, which, in fact, does not correspond to reality, creates insuperable theoretical difficulties.

In a state of equilibrium investment would be equal to saving. There is a trade cycle because investment is not equal to saving.

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[20] *Prosperity and Depression* (League), p. 170 *et seq.*

[21] Ibid, p. 175.

APPENDIX A (CHAPTER II)

THE RICARDO EFFECT

The discussion of the trade cycle among the leading world economists has reached a stage where (to the present writer) all seems confusion, so that almost anything is credible. Economists rapidly shift their position and, almost in the same breath, make contradictory assumptions to account for the same phenomenon. Prof. Harek, for example, built up his argument, first assuming conditions of full employment; given these conditions, the check to further expansion of business activity can be easily comprehended—further expansion cannot continue because there are no more idle factors which can be dawn into employment.

Recently Prof. Hayek has changed his position. He no longer finds any use for the assumption of full employment to explain the upper turning point. What is more, the rate of interest may remain unchanged throughout the period of expanding business activity! Now the rate of interest plays a vital role in the traditional explanation of the trade cycle. Irwing Fisher's explanation is entirely in terms of the rate of interest—when prices are rising or falling and the adjustment of the rate of interest to the price changes is imperfect, profits or losses arise which lead to the expansion or contraction of business activity respectively. The "natural" rate of interest is of fundamental importance in the Wicksellian account; there are crises because money rates fall below or rise above the "natural" rate of interest. According to Prof. Hayek's new theory, on the other hand, the rate of interest is of no consequence; what really matters is rise and fall in real wages. Prof. Hayek's somewhat startling conclusion is based on what he calls "the Ricardo effect," the substance of which is contained "in the familiar Ricardian proposition that a rise in (real) wages will encourage capitalists to substitute machinery for labour and *vice versa*."[1] When real wages rise, under certain conditions it may be profitable to substitute capital for labour; when they fall, labour may be substituted for capital. On account of changes in real wages methods of production become more or less capitalistic.

In the course of the upward swing of prices, demand for consumers' goods increases and therefore their prices go up. According to the Principle of Acceleration, an increase in the demand for consumption goods should very greatly stimulate the demand for investment goods, thus leading to a very considerable increase of investment in industries producing such goods. According to Prof. Hayek, on the other hand, when the demand for consumption goods increases and their prices rise, there is a fall in investment. Why? A rise in the prices of consumers' goods increases the profitability of less roundabout methods of production. Prof. Hayek gives the following numerical illustration :[2]

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[1] *Prosperity and Depression* by Haberler, p. 482.

	Labour invested for				
	2 years	1 year	6 months	3 months	1 month
Initial amount of profit on each turnover in per cent	12	6	3	1 1/2	1/2
	(all corresponding to $6^{0}/_{0}$ per annum)				
Add 2 per cent additional profit on each turnover due to rise in price of product	14	8	5	3 1/2	2 1/2
Resulting profit rate per annum (compound interest neglected)	7	8	10	14	30

Of different methods of production, those requiring investment of labour for longer periods are more roundabout. We assume that the same commodity may be produced by a shorter or a longer labour process (labour invested for one month or two years). It follows that when, owing to the rise in prices, there is an additional profit of 2 per cent on each turnover, the annual rate of profit is considerably higher when the less roundabout methods are employed. Labour is substituted for machinery, demand for investment goods falls off and there is consequently a contraction of investment goods industries. The Ricardo Effect thus accounts for the upper turning point.[3]

It may be similarly argued that in the earlier phase of the trade cycle, before the prices of consumers' goods begin to rise, real wages are high, which leads to the substitution of capital for labour—the Ricardo Effect again. The demand for capital goods increases and industries producing them expand, which leads to better trade and growing prosperity until the check in the shape of a fall in real wages begins to operate.

Prof. Hayek's critics point out that production periods of 3,4,5 years better correspond to reality than those of 1,3,6 months, etc. A rise in product prices of 2 per cent will raise the annual rate of profit from $6^{0}/_{0}$ to 6.8,6.6 and 6.5 per cent for production periods of 3,4,5 years respectively—an insignificant change. Further, the substitution of capital for labour and labour for capital is not such an easy process as Prof. Hayek supposes. As is usual, such arguments proceed entirely on an imaginary basis, without any attempt at statistical verification of the assumptions made or the conclusion reached. Haberler suggests that "it is more correct to assume that labour and capital are complementary (must be used in a fixed proportion) than that they can be easily substituted for one another."[4] Secondly, when demand for consumers' goods increases, normally there would be larger investment, if fixed capital was already being used to full capacity. That with rising prices of consumers' goods there should be a fall in investment in a capitalist economy, is contrary to commonsense and experience. Thirdly, have we any evidence to show that when money wages rise, as they do in

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2. Ibid, p. 484.
3. Ibid, p. 485,
4. Ibid, p. 489.

the upward phase of the trade cycle, real wages invariably fall? A statistical study supports the opposite conclusion: "Statistically," says Dr. Dunlop, "real wage rates generally rise with an increase in (money) wage-rates, rise during a first period after the peak and then fall under the pressure of severe wage-reductions."

Prof. Hayek's Ricardo Effect explains nothing. The Raman Effect in Physics is an established fact. When economists begin to talk of "Effects" they forget the difference between the exact sciences and an inexact "science" like our own.

CHAPTER III

THE ROLE OF THE STATE

There is an important difference between savings and investment. Savings grow steadily as they depend on habits and customs which change very slowly. But investment is necessarily unstable. Discovery and invention obey no law and, then, as we have seen, very small changes in the rate at which consumption is increasing or decreasing produce very large fluctuations in investment. The trade cycle cannot be overcome without the regulation of investment.

1. THE INVESTMENT MULTIPLIER

In a depression savings exceed investment and the problem is one of stimulating investment. Increase of investment adds to the community's income. How?

Keynes's Investment Multiplier tells us that when there is an increment of aggregate investment, income increases by an amount which is K times the increment of investment.

Suppose there is increase in investment in capital goods' industries of 1 unit. The investment takes the form of buildings, machinery and raw materials. Producers get the money spent. Of this sum, suppose one-half is saved by them and one-half spent on consumers' goods. This means another addition of 0.5 to the income of producers. Of the addition of 0.5 to their income, the producers again save one-half and spend the other half on consumers' goods, and so on. The increase in producers' income is given by the series:

$$1 + \frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \frac{1}{32} + \frac{1}{64} + \cdots\cdots = 2$$

Assuming that of a given increment in national income one-half is spent and one-half saved, K, or the Investment Multiplier, is 2.

Let us call the fraction of income spent on consumers' goods C. Then the amount saved is 1 – C, and

$$K = \frac{1}{1-C} = \frac{1}{1-\frac{1}{2}} = 2$$

Suppose $1 - C = 0.25$, or saving is one-fourth of a given increment in income, C being equal to 0.75. Then

$$K = \frac{1}{1-C} = \frac{1}{1-0.75} = \frac{1}{0.25} = 4$$

The pure theory of the multiplier establishes a precise relationship between the multiplier and the marginal propensity to consume. This latter is the relationship between an increment of income and the expenditure on consumption out of this increment. A marginal propensity to consume of, for example, 9/10 means that 9/10 of the next increment of income will be consumed, and 1/10 saved (1/10 is thus the marginal propensity to save). The marginal propensity to consume may be taken to be smaller than unity, for when the real income of a community increases or decreases, its consumption will increase or decrease, but at a lower rate. If the marginal propensity to consume were 1, the whole increment of income would be consumed, and nothing would be saved. Normally that does not happen.

The multiplier is the reciprocal of the fraction saved. If the fraction saved is ½, then the multiplier is 2; if the fraction saved is 1/10, the multiplier is 10.

2. THE MULTIPLIER AND EMPLOYMENT

Given the marginal propensity to save of 1/10, Keynes tells us that "the total employment caused (for example) by public works will be ten times the primary employment provided by the public works themselves, assuming no reduction of investment in other directions."[1] This implies that the multiplier in relation to employment is concerned with the effect of an increment of *net*, not gross investment. There is no addition to net investment if increase of investment in certain branches of industry is neutralised by an equal amount of reduction of investment in other branches. This is an important consideration when it is desired to stimulate investment by means of a public works programme. The public works policy may react unfavourably on private investment by raising the prices of raw material and labour. Profits would shrink and private investment would be discouraged, thus neutralising the effects of the public policy. The rate of interest may be forced up by the Government financial policy. Lack of confidence in Government policy and an unfavourable trend of the balance of trade and payments would also discourage private investment.

But public investment may also encourage private investment—the example set by Government may be followed by others. Indirectly, public investment, by stimulating consumption and thus creating a new demand for consumption goods, may stimulate private investment.

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[1] "General Theory", p. 122.

The *pros* and *cons* of a public works policy are still under discussion by economists, some of them being of the opinion that while, in theory, State expenditure can be increased or decreased in such a way as to keep investment stable, in practice there are "serious difficulties." Crowther, for example, points out that "the choice of projects open to the State is very limited"—for the State cannot set up as a manufacturer or merchant in competitive business. Secondly, the machinery of the State may not move in time: "public works programmes, as a result, have a habit of maturing when they are least needed."[2] But the difficulty may be met by preparing plans well in advance. Thirdly, the State may have to borrow very large sums of money, thus adding heavily to the National Debt. A rapidly mounting National Debt necessitates heavier taxation of industry, which would tend to discourage private investment. Thus private investment may fall off as public investment increases. But it is also possible that it may not. The points urged by Crowther are not to be taken, as he himself tells us, as a "full and final discussion of a large and intricate subject." Experience will be the best teacher.

The scope for a public works policy, particularly in countries like India, is fairly wide, as the following examples will show :—

1. The State may establish Public Corporations on the model of the T. V. A. for large projects concerned with the economic development of a whole region. The Damodar Valley Project is an example.

2. When a more rapid expansion of an existing industry is desirable, which would involve large capital expenditure, and when, in private hands, the business would be of a monopolistic character, the State may intervene. Examples are public utilities like the supply of water for drinking purposes and hydro-electric projects.

3. The State may help to modernise an industry whose technique has become antiquated. The State would have to play a leading role in the modernisation of Indian agriculture.

4. In certain cases where there is great risk and uncertainty, as in the production of synthetic materials, or of oil from coal, the State must help directly or indirectly.

5. The State must lead the way in the development and popularisation of new or improved methods of production. This may be done by the setting up of experimental or research laboratories and experimental factories by the State, and by granting assistance to private bodies and associations experimenting in new techniques of production.

6. There is a wide field for the development of civil engineering in relation to roads, bridges, drainage schemes, tube-well irrigation and aerodromes, and of public amenities like open air theatres, parks, playing fields, hospitals, etc.

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[2] *An Outline of Money*, p. 190.

7. There is enormous scope for the development of air-craft production, ship-building and manufacture of agricultural and other machines requiring large investment of capital.

3. BUDGETARY POLICY

A change, which may be described as revolutionary, has taken place in regard to the view of governmental functions both in peace and war. This change dates from the Great Depression, so far as experience gained in peace time is concerned. But German war experience, during the first World War, suggested to Rathenau, the Economic Director of Germany entrusted with the duty of countering the Allied blockade, the conception of a State interfering in everything, according to a pre-determined plan, with the object of increasing the material welfare of the people. Rathenau had a vision of the future State as " the guardian and administrator of enormous means of investment."[3] He says :

> " The goal, however, is that the State should be unhampered by the material restrictions. Its means must enable it to anticipate need, not to limp painfully after need. It must not be compelled to ask the question, how can I raise the money ? It must merely have to ask, how can I best do the work ? "[4]

In war-time the State assumes responsibility not merely for national defence but for the diversion of capital and labour from employments of peace to employments connected, directly or indirectly with war. Without such diversion of resources no modern war can be successfully waged. If the State can, with justification, assume the supreme direction of all economic activity to win the battles of war, it may, with equal justification, do so in times of peace to secure " full employment." The battles of peace are not less important than those of war. The structure of capitalism has profoundly changed during the past 50 years and State action to regulate investment and maintain employment by means of an appropriate fiscal policy is not only not looked upon with disfavour by many economists to-day, but viewed as a necessity.

4. THE LAISSEZ FAIRE POINT OF VIEW

The duties with which the sovereign was entrusted by Adam Smith were simple : " The sovereign," wrote Adam Smith, "is completely discharged from a duty in the attempting to perform which he must always be exposed to innumerable delusions, and for the proper performance of which no human wisdom or knowledge could ever be sufficient : the duty of superintending the industry of private people and of directing it towards the employments most suitable to the interests of the society."[5] The sovereign was to attend to three duties only. Defence, Justice, and erecting and maintaining certain public works which were useful to society as a whole.

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[3] 'In Days to Come' p. 260.

[4] Ibid, pp. 91-2.

[5] 'Wealth of Nations, ' Book IV, Chapter 9.'

Keynes announced the end of *laissez faire* in the course of lectures delivered in 1924 and 1926. The old economic order, which inspired the *laissez faire* doctrine, had passed away. The size of the business unit had increased, and internal economies tended " to the aggregation of production "; the time required for adjustments was long, and monopolies and combinations interfered with equalities in bargaining. These changes have destroyed the very foundations of *laissez faire*. The economic system has tended to become more and more rigid, which must make adjustment or adaptation to new situations increasingly difficult. Keynes laid emphasis on three things : (1) the deliberate control of the currency and of credit by a central institution, which will claim our attention later (2) regulation and direction of saving and investment, which is under discussion, and (3) a national policy about the size of the population, with which we are not concerned in this book.

5. SOCIAL EXPENDITURE

When the sovereign has only such simple duties to perform as Adam Smith's sovereign, his revenues will ordinarily form a comparatively small proportion of the national income. Government spending would not, except in a war, have much influence on prices, employment or the distribution of income. Jean Baptist Say formulated the "golden maxim " that " the very best of all plans of finance is to spend little, and the best of all taxes is that which is least in amount.'[6] Say's idea was that taxes should be as neutral as possible in their effects on the price structure and the distribution of income.

Where the burden of taxation is light, or taxes are small in amount, their effect on prices and the distribution of income may not be perceptible. This was probably the case when J. B. Say and Adam Smith wrote. But in the closing years of the last century, the social expenditure of government in the leading industrial countries began to increase. This expenditure took the form of health insurance, unemployment insurance and old age pensions, and it meant the taxation of the rich for the benefit of the poor. There were protests from economists who still persisted in thinking on stereotyped lines. For example, Prof. Leroy Beaulieu, writing in 1881, maintained that the role of the State consisted solely in removing legislative or administrative obstacles to a less unequal distribution of wealth. "It is not for the State to put before itself the aim of the greatest happiness of the greatest number, as propounded by utilitarians like Bentham on the one side, and the socialists on the other side'' *La justice, c'est le seul idéal que l'Etat doive poursuivre*" - (justice is the sole ideal that the State ought to pursue.) "*La stricte justice, et rien de plus, voila l'idéal social*" - (Strict justice and nothing more, such is the social ideal). Strict justice means that the State assists the individual negatively, by removing obstacles which hinder his progress ; is does not mean the transfer of wealth from the rich to the poor through taxation.

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[6] ' Economic Stability in the Post-War World,' p. 163.

These protests proved unavailing and social expenditure of governments continued to mount. The contemplated edifice of post-war social security in countries like the United States and the United Kingdom is imposing. In the United States the Government is to guarantee, among other things, equal, access to security ; equal access to education for all and equal, wholesome housing conditions for all. The Beveridge Report might well make us in this country gasp. Its aim is to abolish want in the United Kingdom, and with this object in view all kinds of assistance will be provided by the State, including training benefits, unemployment benefits, pensions, family allowances, free medical treatment, maternity benefits and even a funeral grant. The State is to take care of the individual from the moment of birth till he or she is dead and buried.

The estimated total social security expenditure under the Beveridge Plan is expected to amount to over £850,000,000 in 1965.

It is obvious that such heavy expenditure by the State must involve the heaviest taxation. It cannot but affect the price structure; heavy taxation on the one hand adds to cost of production, and, on the other, by redistributing incomes, affects consumers' demands. It is also obvious that State expenditure amounting to 20-30% of the national income must react on the level of employment in the country.

6. BUDGETARY BALANCE.

Economic conditions are altered directly when the State embarks on a public works programme, bringing the Multiplier into play. This has been already explained. We may here consider the problem of budget balancing in relation to the trade cycle.

When a new Government was formed in the Punjab in March 1946, and the budget for 1946-47 was presented by the new Finance Minister, there was some discussion of the budgetary policy of Sir Manohar Lal, who was the custodian of Punjab finances from 1937-38 to 1945-46. Heavy surpluses were realised after 1940-41, which Sir Manohar Lal carefully husbanded, without reducing expenditure on what are euphemistically called the 'Nation-building Departments.' Ignorant critics took Sir Manohar Lal to task for accumulating surpluses, which he might have easily spent. What was his defence ? In introducing the budget for 1945-46 he said :

" In finance prudence must still be our guide. We must not be affected overmuch by the doctrine of budgetary balance. It is no simple teaching any how, and in provincial finance where emphasis lies on acquiring and gathering all possible strength within its exiguous limits, its application is of a very restricted nature. Most liberally conceived, it cannot mean ' balance ' in any single year, it can only signify a balance in a series of years—the balance to be secured not by cutting down revenues but by prudent and wise expansion of expenditure along urgent and desirable directions."

Holding this view of budgetary balance, Sir Manohar Lal welcomed the surpluses created by the war-time rise of prices, and considered their transfer into various funds of the highest utility.

The budget may be balanced not over one year but over a series of years. In years of unexpected prosperity surpluses may be husbanded, to be spent during lean years.

The trade cycle comprises fat and lean years. Budget-balancing over a series of years may be used as a means of mitigating the effects of cyclical fluctuations. This is called contra-cyclical management of public finance.

7. DEFICIT BUDGETING

From this point of view no opprobruim attaches to deficit budgeting in years of depression. To create employment the State may deliberately increase its expenditure, meeting the deficit by means of a loan. Deficits may be incurred year after year until the stress of depression relaxes. Later, when prosperity returns, realised surpluses may be used to pay off the deficit debt.

Let us return for a moment to Sir Manohar Lal's budgetary policy. If he had started spending his surpluses, he would have thereby created an additional demand for goods and services which had already become scarcer on account of the war demand. When prices rise, as in the phase of the upward swing of the trade cycle, Government income increases on account of the increased yield of taxation and other sources of public revenues. If, at such a time, State expenditure also increases, rising prices would tend to rise higher still. In a time of depression public revenues contract, and unless State expenditure is increased, *e.g.*, by means of State-borrowing, falling prices would tend to fall lower still. Budget-balancing from year to year is therefore a wrong policy during a trade-cycle, as it will tend to intensify both the boom and the slump. Contra-cyclical budgeting must be budget-balancing over a series of years.

8. THE REVENUE AND EXPENDITURE METHODS

A contra-cyclical fiscal policy may operate through public revenues or public expenditure. So far we have emphasised the need for elasticity in Government expenditure. But Government may also operate through revenue. In years of depression some taxes may be remitted and others reduced, thus increasing the funds in the hands of the public for consumption. It has been suggested that the rates of certain taxes might be made to rise and fall automatically with an index of unemployment or of national income. Again, income-tax authorities way permit the offsetting of losses during depression against profits made in periods of prosperity, and grant more liberal allowances for depreciation and obsolescence.

The revenue method is considered to be less effective than the expenditure method in stimulating national outlay and employment.

The revenue method also cannot direct expenditures into particular channels, as the initiative is left to the general public. A combination of both methods, which is entirely possible, may be expected to yield the best results.

Public works programmes, if they are to be effective in reducing unemployment in a depression, must be put into force speedily. Many countries have started planning well in advance. When a crisis comes, it finds the public authorities ready with their plans and projects.

9. THE SWEDISH EXPERIMENT

We shall now describe State action taken in two countries, Sweden and Germany, during the Great Depression, to assist recovery.

The Swedish economist, Prof. Myrdal, who has been mentioned above, was able to persuade the Labour Finance Minister of Sweden, Mr. Wigforss, to adopt a public works programme as a means of stimulating industrial recovery. In his first budget estimate of January 1933 the Finance Minister proposed to borrow 160 million Kroner to finance public works which were not self-liquidating. Death duties were to be raised to provide for the amortization of the special loans within four years. Mr. Wigforss said: "The budget is based on the assumption that the international situation will undergo no appreciable change and that in Sweden there will be no spontaneous tendency towards recovery, except to the extent that the policy of the State will help to bring it about . . . . In seeking to achieve the object, the State's financial policy must obviously play an important part." To meet conservative opposition, the sum to be borrowed was reduced by 10 million Kroner and the amortization period increased to five years.

In the second budget presented in January 1934, provision was made for further borrowing to the extent of 120 million Kroner to be spent on "unproductive" public works. The redemption period was fixed at seven years. The minister maintained that as the forces making for recovery were still weak, public investment financed by loans would be of great value as a means of increasing employment.

THE SWEDISH BUDGET, 1928-29 to 1935-36
(Million Kroner)
Expenditure

	Current Expenditure	Ordinary Budget Capital Expenditure	Total	Loan Budget Expenditure financed by borrowing	Grand Total
1928-29	658.53	33.41	691.94	49.35	741.29
1929-30	689.29	55.62	744.90	34.41	779.31
1930-31	719.48	44.07	763.55	49.82	813.37
1931-32	760.89	55.56	816.45	72.80	889.25
1932-33	814.49	23.72	838.21	103.87	942.08
1933-34	720.37	39.48	759.85	269.49	1 029.34
1934-35	769.97	54.26	824.23	282.12	1106.35
1935-36	866.79	62.02	928.81	136.64	1065.45

7. *Monetary Policy and Crises* by Brinley Thomas, p. 208.

It will be seen from the Table given above that aggregate expenditure increased steadily from 779.31 million to 1106.35 million Kronor between 1929-30 to 1934-35. The proportion of loan budget expenditure to total expenditure rose from 11.0 per cent in 1932-33 to 25.8 per cent in 1933-35. New loan expenditure for non-self-liquidating public works formed 15 per cent of the total budget in 1933-34.

Under-balancing or deficit financing must be followed by years of careful, cautious finance. In the budget for 1935-36 loan budget expenditure was brought down from 282.12 million in 1934-35 to 136.64 million Kronor.

As will be seen from the indices of industrial production given below, the experiment was successful, and in the budget for 1936-37 the income-tax was reduced by 12 per cent.

INDEX NUMBERS OF INDUSTRIAL PRODUCTION IN SWEDEN BY GROUPS OF INDUSTRIES

Year.	General Index.	Investment goods	Consumption goods.
1929	81	76	79
1930	83	78	83
1931	78	73	83
1932	72	64	83
1933	74	64	84
1934	89	83	94
1935	100	100	100
1936	109	110	106
1937	122	125	115
1938	123	131	119

"The experiment of using the budget as an instrument of expansionist policy," says Brinley Thomas, "has thus been abundantly justified; and the experience of this new technique will be of great advantage to Sweden in dealing with future crises."

10. THE ROLE OF TAXATION

Recent developments in monetary theory, in their application to budgetary policy, have conferred a new role on central taxation which would have been regarded by most orthodox economists of fifty years ago with horror. Through taxation the State may encourage the propensity to consume, which will ultimately increase the inducement to invest, and thus increase employment.

In the Swedish budget estimate of January 1933, death duties were raised to yield 40 million Kronor; in the next year's budget 26 millions were to be obtained from death duties, eight millions from a new sur-tax on large properties and incomes, and six millions from a stamp duty on estates. The object of additional taxation was to obtain cover for amortization of the State's loan expenditure. The loan expenditure, as we have seen, was designed to create employment and thus to assist recovery.

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8. League Statistics, 1942-44, p. 184.
9. *Monetary Policy and Crises*, p. 213.

Do not death duties reduce the capital wealth of the country? Will not heavy taxation of the rich tend to dry up the springs of savings, and therefore those of investment? The truth is exactly the opposite. Death duties and other duties on estates, and taxes, may be used to lower consumption taxes and to increase in other ways the purchasing power of large sections of the population. The growth of wealth in contemporary conditions, says Keynes, is impeded by the abstinence of the rich.

11. THE GERMAN EXPERIMENT

It will have been noticed that the Swedish public works programme included "unproductive" public works. In a depression speedy, large scale action is required. Workers have to be kept employed, and it is not of much consequence whether the public works which the State loan expenditure finances are immediately or only remotely productive. Even pyramid-building helps.

In Germany the first public works programme was initiated in the summer of 1932. To the end of 1934, the following sums of money had been actually expended :

Employment creation programmes of the Reich ...	1,536.5
Budget of the Reich	727.6
Employment Board (relief works, labour service) ...	431.8
Railways	991.0
Post Office	111.0
Reich Motor Roads	66.0
TOTAL ...	3963.9

"Most of the undertakings," says Guillebaud, "were either immediately, or sometimes, rather remotely productive."[10] But there were also cases of pyramid-building—work was created just in order to provide employment.

Dr. Guillebaud thus comments on the role of the State in German recovery between 1933-38.

"While recovery has been directly based upon the expansion of State investment, at first in the form of public works but later to be potentially re-inforced by re-armament expenditure, a most essential feature has been the control of the volume and direction of private investment. In place of the ordinary profit incentive to investment in a free economic system, there has been a careful and thorough regulation, which was initially designed mainly in order to prevent over-investment in particular industries, but was subsequently extended to the general allocation of investment in accordance with its importance for the needs of the State."

The rate of interest was stabilised at a relatively low level by the manipulation of the money and capital markets. Speculative activity on the State Exchange was curbed by the Law preventing the distribution of dividends in excess of 6 per cent, combined with the control over new capital issues.

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[10] *Economic Recovery of Germany*, p. 51.

Comprehensive and effective measures were thus taken by the State to guide and control investment.

12. SOCIALISATION OF INVESTMENT

Banking policy operates though its control of the price of credit and the volume of credit. It can achieve its result only by influencing the business decisions and choices of a great many individuals acting independently of each other. Theoretically, it may be so framed that investment and savings stand in an ideal relation to each other, or that an optimum rate of investment emerges, which is not the highest possible rate of investment, but a rate sufficient to secure and maintain conditions of full employment. In actual practice, bankers may fail to discover the ideal rate of interest for the required regulation of investment—banking policy will leave gaps which the State must endeavour to fill. Keynes says:

> "The state will have to exercise a guiding influence on the propensity to consume partly through its scheme of taxation, partly by fixing the rate of interest, and partly, perhaps, in other ways. Furthermore, it seems unlikely that the influence of banking policy on the rate of interest will be sufficient by itself to determine an optimum rate of investment. I conceive, therefore, that a somewhat comprehensive socialisation of investment will prove the only means of securing an approximation to full employment; though this need not exclude all manner of compromises and of devices by which public authority will co-operate with private initiative. But beyond this no obvious case is made out for a system of State Socialism which would embrace most of the economic life of the community. It is not the ownership of the instruments of production which it is important for the State to assume. If the State is able to determine the aggregate amount of resources devoted to augmenting the instruments and the basic reward to those who own them, it will have accomplished all that is necessary."[11]

There was socialisation of investment in Germany during the reconstruction period in the sense in which Keynes has used the phrase. The State did not own instruments of production, as was the case in Russia, but through its regulations of interest and profits it controlled the "basic rate of reward" to owners of the instruments, and was thereby enabled to determine the rate of investment, and to create the conditions of full employment. That the object of full employment was preparation for war is immaterial. Full employment secured by these means may serve the purposes of peace.

Socialisation of investment is a very great departure from the principles of *laissez faire*, as it involves a very great extension of governmental authority in economic matters.. Whether it is consistent with maintenance of freedom of individual initiative and enterprise, as in a capitalist economy, and the principles of parliamenary democracy, is extremely doubtful. Keynes himself thought that planned investment was consistent with freedom.*

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[11] *General Theory*, p. 380.

APPENDIX B (CHAPTER III)

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SYNTHESIS OF THE MULTIPLIER AND THE PRINCIPLE OF ACCELERATION

The Multiplier, as we have seen, is concerned with the increase in a community's income resulting from, let us say, Government deficit spending, that is to say, the Government borrows a certain amount to spend it on public works. Assuming that the marginal propensity to consume is 1/2, then, as has been explained before, the Multiplier is 2.

Suppose Government spends 1 rupee (our unit may be a crore of rupees or any other amount) on public works, not once for all, but continuously at regular intervals of a year or six months. The following Table shows the effects on national income of a series of expenditures, assuming that *c* (marginal propensity to consume) = 1/2 :

TABLE 1

Number of Period	Initial expenditures	Income Receipts through successive expenditures of ½ of receipts in the preceding period										
1	1											
2	1	1/2										
3	1	1/2	1/4									
4	1	1/2	1/4	1/8								
5	1	1/2	1/4	1/8	1/16							
6	1	1/2	1/4	1/8	1/16	1/32						
7	1	1/2	1/4	1/8	1/16	1/32	1/64					
8	1	1/2	1/4	1/8	1/16	1/32	1/64	1/128				
9	1	1/2	1/4	1/8	1/16	1/32	1/64	1/128	1/256			
10	1	1/2	1/4	1/8	1/16	1/32	1/64	1/128	1/256	1/512		
11	1	1/2	1/4	1/8	1/16	1/32	1/64	1/128	1/256	1/512	1/1024	
12	1	1/2	1/4	1/8	1/16	1/32	1/64	1/128	1/256	1/512	1/1024	1/2048

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* "The authoritarian State systems" Keynes says, "to-day seem to solve the problem of unemployment at the expense of efficiency and of freedom. It is certain that the world will not much longer tolerate the unemployment which, apart from brief intervals of excitement, is associated, in my opinion, inevitably associated—with present-day capitalistic individualism. But it may be possible by a right analysis of the problems to cure the disease whilst preserving efficiency and freedom." (*General Theory*, p. 381),

The sum of diagonal figures, if continued long enough, will be ultimately equal to 2. Similarly the sum of horizontal figures if continued long enough, would ultimately be , equal to 2. We may, for example, take the expenditure of a rupee in the 12th period. The horizontal figures add up to $1 \frac{2047}{2048}$. That will be the national income in the 12th period. Income will continue to mount in successive periods after the 12th, the rate of increase slowing down progressively. The approach to the Multiplier, 2, is asymptotic. It may be noted that at the end of the 12th period deficiency amounts exactly to the increment in the 12th period, $\frac{1}{2048}$.

When the pure Multiplier is considered, the additions to the national income consist of two components, (*a*) the initial governmental expenditure and (*b*) private consumption expenditure induced by previous governmental expenditure.

We may now introduce a third factor, increase in private investment induced by an increase in consumption. The Principle of Acceleration tells us that changes in the demand for and production of finished goods give rise to much greater changes in the demand for and production of producers' goods. When, therefore, governmental spending induces an increase in consumption, there must be a certain increase in private investment.

Professor Samuelson has given a numerical illustration of the synthesis of the Principle of Acceleration and the Multiplier, assuming (1) continuous Government deficit spending of 1 dollar in successive periods, (2) a marginal propensity to consume of 1/2, and (3) that induced private investment is equal to the increase in consumption between the previous and the current period. The last assumption may be called the *Relation* and represented by β. It is taken as unity, *i.e.*, the increase in consumption between two periods of one dollar will result in one dollar's worth of induced private investment.

Professor Samuelson's demonstration is highly interesting. In the first period current governmental expenditure is one dollar. As there is no previous expenditure, the figures in the next two columns of Table 2 are 0.00, and total national income increases by the amount of current governmental expenditure, one dollar.

For period 2, current governmental expenditure is, as before, one dollar. Current consumption induced by previous governmental expenditure is one-half of the dollar which Government spent in the first period, or 0·50. The figure in the third column is the excess of current consumption in the second period over that for the first period. Total national income is now 2.00 (1.00 + .50 + .50). For the sixth period, current consumption is one-half of the total national income in the fifth period $(\frac{2.25}{2} = 1.125)$, current private investment is negative as the current consumption of the 6th period is less than that of the 5th, and total national income is $1 + 1.125 - 0.125 = 2.00$. And so on.

TABLE 2*

The Development of National Income as a result of a continuous Level of Governmental expenditure when the Marginal Propensity to consume equals one-half and the Reaction equals Unity.

(Unit=one dollar)

Period	Current Governmental expenditure	Current consumption induced by previous expenditure	Current private investment proportional to time increase in consumption	Total National income
1	1·00	0·00	0·00	1·00
2	1·00	0·50	0·50	2·00
3	1·00	1·00	0·50	2·50
4	1·00	1·25	0·25	2·50
5	1·00	1·25	0·00	2·25
6	1·00	1·125	–0·125	2·00
7	1·00	1·00	–0·125	1·875
8	1·00	0·9375	–0·0625	1·875
9	1·00	0·9375	0·00	1·9375
10	1·00	0·96875	0·03125	2·00
11	1·00	1·00	0·03125	2·03125
12	1·00	1·015625	0·015625	3·03125
13	1·00	1·015625	0·00	2·015625
14	1·00	1·0078125	–0·0078125	2·00

It is evident that a constant level of governmental expenditure is no means of stabilizing the national income, for total national income, shown in the last column, varies cyclically. It reaches a peak at the third period, a trough at the seventh, a peak at the 11th, etc. If c (marginal propensity to consume) and β (the *Relation*, or induced current private investment) were greater, the oscillation would become "explosive." "For still higher values of the two co-efficients a constant level of governmental expenditure will result in ever increasing national income without any oscillations."

**Prosperity and Depression* by Haberler, p. 476.

Instead of being maintained at a constant level, current governmental expenditure may be varied from period to period to secure a rising national income. A numerical illustration is given below.

TABLE 3

The Development of Natonal Income as a result of a *Rising* level of Governmental expenditure when the Marginal propensity to consume equals one-half and the Relation equals unity.

(Unit=one dollar)

Period	Current Governmental expenditure	Current consumption induced by previous expenditure	Current private investment proportional to time increase in consumption	Total Natonal income
1	1·00	0·00	0·00	1·00
2	1·11	·50	·50	2·11
3	1·24	1·055	·555	2·85
4	1·39	1·425	·37	3·185
5	1·56	1·5925	·1675	3·32
6	1·75	1·66	·1675	3·4775
7	1·96	1·73875	·07875	3·7775
8	2·19	1·88875	·15	4·22875
9	2·44	2·114375	·225625	4.78
10	2·71	2·39	·275625	5·375625
11	3·00	2·6878125	·2978125	5·985625

Current governmental expenditure has been assumed to increase according to the equation :

$$y = 1.0 + 0.1\,x + 0.01\,x^2$$

c and β have the same meaning as in Table 2.

A rising level of governmental expenditure removes the negative current private investments of column. 3 of Table 2 and also the peaks and troughs of the last column of the same Table. The national income rises throughout but the rate of increase slows down at a certain stage. Even this may be remedied by appropriate changes in governmental expenditure.

We may finally study Table 4, showing the different results obtained by varying one or both co-efficients.

TABLE 4

No. of Period	Current Governmental expenditure	Total National Income			
		$c=\frac{1}{2}$ $\beta=2$	$c=\frac{1}{2}$ $\beta=\frac{1}{5}$	$c=\frac{9}{10}$ $\beta=\frac{1}{2}$	$c=\frac{9}{10}$ $\beta=2$
1	2	3	4	5	6
1	1·00	1·00	1·00000	1·00	1·0
2	1·00	2·50	1·60000	2·35	3·7
3	1·00	3·75	1·85600	2·72	9·2
4	1·00	4·13	1·98760	3·62	19·2
5	1·00	3·44	1·99696	4·66	36·2
6	1·00	2·03	1·99942	5·66	64·2
7	1·00	·61	1·99995	6.54	109·2
8	1·00	– ·12	2·00003	7·29	180·3
9	1·00	·22	2·00002	7·90	290·4
10	1·00	1·44	2·00001	8·38	462·2
11	1·00	2·94	2·00000	8·76	726·3
12	1·00	3·98	2·00000	9·05	1130·1
13	1·00	4.02	2·00000	9·28	1744·9
14	1·00	3.05	2·00000	9·45	2678·0
15	1·00	1.56	2·00000	9·59	4090·9
16	1.00	·50	2·00000	9·69	6225·9

The oscillations are intensified if $c = \frac{1}{2}$ and $\beta = 2$. The figures in the 3rd column of Table 4, perhaps, illustrate what actually happens in a capitalist economy. Assuming that an increase in consumption of one dollar induces a private investment of two dollars, we have violent fluctuations of total income, which becomes negative in the eighth period.

If $c = 1/2$ and $\beta = 1/5$, national income at first rises rapidly and then becomes stable at a level twice as high as before.

Taking $c = 9/10$ and $\beta = 1/2$, there is a steady increase of national income from 1.00 dollars to 9.69 dollars at the end.

Working with $c = 9/10$ and $\beta = 2$, we have, in the last column of the Table, increased national income from one dollar to 6,226 dollars! Higher values of the two co-efficients, while they result in "ever increasing national income without any oscillations," as has been observed by Professor Samuelson, also turn the whole thing into a joke.

CHAPTER IV

THE ROLE OF BANKS

In his Memorandum on " Proposals for the establishment of a State Bank in India, " printed as annexe to the Report of the Chamberlain Currency Commission (1914), J. M. Keynes said that India and the United States were alone not only in having no Central Bank, but, " in having no re-discount market, no elasticity in the note-issue, no bank rate policy, and an ' Independent Treasury System ' in place of a Government banker." Keynes regarded the situation in both countries as extremely unsatisfactory. He thought there would be opposition in the United States on the part of independent banks to control by a central institution, but " in India," he said, " the obstacles are far less to the introduction of the recognised preventives for the diseases of the financial body."

1. SEPARATE RESERVES

In our own country the " Independent Treasury System " created monetary stringency by withdrawing large sums of money from the money market. At the time when Keynes wrote, and also for many years thereafter, the rate of discount used to rise to 7 or 8 per cent in the busy season and fall to 3 or 4 per cent in the slack season. Two reserves had to be maintained, which were separately and independently controlled ; the Government issued the currency, and maintained reserves to prevent the gold value of the rupee from falling below the specie point , while banking reserves, after 1921, were controlled by the Imperial Bank, so far as they were controlled at all.

2. UNIFICATION OF CONTROL

With the transfer of the note-issue to the Reserve Bank of India in 1935, the control of both the currency and the banking reserves of the country passed into the same hands. Against the notes of the Reserve Bank, not less than 40 per cent reserve in the form of gold coin, gold bullion or sterling securities must be maintained. Actually on 29th March, 1946, against total notes issued of the amount of 1,238,41 lakhs, there was gold coin and bullion in the reserve amounting to 44,42 lakhs, and sterling securities valued at 1,120,32 lakhs, the two together amounting to 94·05 per cent of the total notes issued. It will be seen that we have no fixed maximum for the fiduciary issue ; fiduciary circulation may be increased to any limit, provided a reserve of not less than 40 per cent gold *plus* sterling securities is maintained.

This reserve requirement may be suspended when need arises on the payment of a tax to Government, the rate of the tax rising progressively with the fall in the gold (*plus* sterling securities) holding below specified percentages.

We thus possess an elastic system of note-issue. Further, rediscount facilities have been provided and the Reserve Bank of India enjoys the power of open market operations.

3. WEAPONS OF CREDIT CONTROL

The most important weapons of credit control are the manipulation of the Bank Rate, and Open Market Operation of the Central Bank. Credit may be controlled by these means in India, as in the leading countries of the world, but owing to peculiar conditions credit control in India has not the same meaning as in other countries. In this chapter we are chiefly concerned with credit control in the leading industrial countries.

The business cycle is due to monetary as well as non-monetary factors ; it is a national as well as an international phenomenon. But very often short-period fluctuations of prices are discussed as if they were due to the operation of monetary causes alone in a " closed economy." Viewed thus cyclical fluctuations may be avoided, or the trade cycle controlled, by the Central Bank with the assistance of the two major weapons mentioned above.

Expansion of trade activity is marked by an effective increase in the supply of money (MV), and contraction by a reduction both in the quantity of money and its velocity of circulation. The trade cycle thus exhibits the phenomena of inflation and deflation in the upward and downward swings respectively. The trade cycle may be eliminated by monetary stabilization. Monetary stabilization would produce a monetary equilibrium but the equilibrium is like a "razor's edge." Even a slight deviation from the equilibrium position sets in motion forces which produce cumulative effects.

4. CREDIT EXPANSION

Suppose credit is cheap. The bank rate is low and so also the market rate. Borrowing is easy ; bankers grant loans readily for longer periods than usual without asking too many questions. Credit expands, and more and more money comes into circulation. A reduction of 1 or 2 per cent in the rate of interest on advances made by banks may not unduly stimulate borrowing by manufacturers, to whom the rate of profits is more important than the rate of interest. When high profits are expected a 1 per cent or 2 per cent change in the cost of borrowing is not of great consequence. But it is argued that to a merchant even slight changes in the rate of interest are not a matter of indifference, for he works for the dealer's profit, which is not large on each transaction. Thus even a small change in the rate of interest, which may be ignored by manufacturers, may mean substantial gains or losses to merchants. The merchants occupy a strategic position—a fall in the rate of interest would induce them to enlarge their stocks and to place larger orders with manufacturers. Production thus increases, which leads to greater employment, and ultimately to an increase in consumers' income and outlay. Traders' stocks diminish, which leads them to place further orders with manufacturers, and the whole process is repeated. A vicious circle is set up, and a cumulative expansion of productive activity takes place, which is aided and abetted by speculative influences.

As production expands, prices of factors of production begin to rise—they must rise ultimately when idle resources have been brought into use. Rising prices increase profits, and increasing prosperity encourages further borrowing. The cumulative process of expansion is accelerated by a cumulative rise of prices, and also the increasing velocity of circulation.

Can the process continue indefinitely ? Mr. Hawtrey says : " If the restriction of credit did not occur the active phase of the trade cycle could be indefinitely prolonged, at the cost, no doubt, of an indefinite rise of prices and an abandonment of the gold standard."[1]

An indefinite expansion of credit by raising prices above the world level would check exports, stimulate imports, and lead to an outflow of gold. The entire gold and foreign exchange reserve might disappear and the country forced to leave the gold standard.

5. CREDIT CONTRACTION

Credit contraction is also a cumulative process. When prices begin to fall they tend to go on falling. Merchants reduce stocks and, expecting prices to fall further, give smaller orders. Manufacturers and other producers are immediately affected. Unemployment increases, incomes and consumers' outlay contract, which further reduces demand. Stocks accumulate and borrowing is reduced still more. Finally a " dead point " is reached in the downward swing and revival begins. The revival is stimulated by a low Bank rate and open market operations of the Central Bank.

The foregoing account explains the trade cycle in terms of money alone. In this connection the League Report, *Economic Stability in the Post-war World*, says :

" There is a tendency to-day to attach less importance than twenty years ago to interest rates and other instruments of credit policy for relieving depressions or stabilizing business. This change in attitude is largely due to the experience during the Great Depression in the thirties. In some highly industrialised countries interest rates on most classes of credit remained extremely low for a number of years and a high degree of liquidity prevailed, apparently without much influence on economic activity. "[2]

A horse will not drink if it does not want to. Cheap money rates in a depression will not always bring about a revival of business activity. But there is no doubt that a restriction of credit is more effective in checking expansion. Credit policy works better as a " brake " than as an "accelerator."

" We, for our part," continues the League Report, "doubt whether it is possible to check a depression in highly industrialised and financially developed countries by credit policy alone. But

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1. *Trade and Credit*, 1928, p. 98.
2. P. 153.

that does not mean that credit and banking policies are unimportant."[3]

6. INSTRUMENTS OF CREDIT POLICY

(a) Discount Policy.

The manipulation of the Bank Rate influences short-term credit rates, and through them also long-term credit rates.

Suppose the Central Bank decides that a rise in discount rates is called for. It raises its rate of discount. The market rate in England is usually 2 per cent above the Bank rate, with a minimum of 4½ or 5 per cent. A rise in the Bank rate will ordinarily be followed by a rise in the market rate. If it is not, the Central Bank begins to sell securities in the open market. Any member of the general public may buy securities and pay for them by means of a cheque on his own bank. When a large amount of securities is sold, the amount of cash with member banks (Scheduled Banks in India) will decrease and they will be forced to restrict credit.

Similarly when the Central Bank decides that expansion of credit is advisable, it lowers its rate of discount. The market rate falls, but both in England and the United States it does not fall below 4½ or 5 per cent. At these levels, the market rate is " sticky." The reason is that the expenses of a bank are more or less fixed and therefore a bank cannot allow the price it charges for accommodation to fall below what it considers its cost level.

At the bottom of a slump, however, the borrowers are completely unnerved and may be induced to borrow more only by a negative rate of interest, that is to say, the bankers may offer a rate of interest to borrowers for being so good as to borrow money. !

7. LONG-TERM CREDIT

Suppose the Bank Rate falls. This will reduce the profit on discounting bills of exchange. The attraction of Government bonds will increase, and demand for them will increase. If, at the same time, the Central Bank begins to buy Government securities (open market operations), there is a further addition to the demand for gilt-edged securities. The purchase of securities by the Central Bank will increase the cash resources of the member banks and they may also buy more Government bonds. The prices of Government bonds will thus tend to rise, and their yield will fall. When the price of a Government bond (interminable loan) carrying a 3 per cent rate of interest rises from 104 to 110, its yield falls from 3 per cent to about 2.73 per cent. The short rate and the long rate thus tend to move together.

When the yield of Government bonds falls, the public will turn to comparatively safe industrial securities. Their prices will tend to rise, which will lower their yields. The demand for industrial securities with still greater risks and still higher yields will now increase, with the same result. Thus the prices of all securities will tend to rise. It is at this time that more industrial securities are issued and new investment begins, marking a turning of the tide and the beginning of revival.

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[3] Ibid, p. 154.

But in a period of universal distress, gloom and panic, a rise in the price of bonds may not lead to an increase in the demand for industrial securities. And in a boom, when the prices of industrial securities are establishing ever new records, bonds are out of favour. The chain linking the rise and fall in discount rates with the demand for bonds and industrial securities thus breaks in booms and slumps.

8. (b) CHANGES IN RESERVE REQUIREMENTS AND QUALITATIVE CONTROLS

Every Scheduled Bank in India is required by law to maintain with the Reserve Bank a balance the amount of which shall not be at the close of business on any day less than 5 per cent of the demand liabilities and 2 per cent of the time liabilities of such bank. The Reserve Bank of India has no power to raise or lower these Reserve requirements.

But the reserve requirements can be increased or reduced in the United States. Legislation was passed in that country in 1917 authorising the Board of Governors of the Federal Reserve System to change the member banks' reserve requirements by regulation in order to prevent injurious credit expansion or contraction, the minimum reserve percentages not to be less than those laid down in 1917 nor more than twice such percentages. The reserve requirements were raised by one-half in August 1936. There was a heavy inflow of gold into the United States which had increased the cash reserves of the member banks. The increase in cash reserves might have been used to expand credit unduly. The reserve requirements were further increased later up to the limit allowed, and on 1st of May, 1937, the reserve percentages stood at 14, 20, and 26 per cent of demand deposits for country banks, reserve city banks and central reserve city banks respectively, and at 6 per cent of time deposits.

In April, 1938, the reserve requirements were reduced to counteract a recession in economic activity.

In addition to the alteration of reserve requirements, the Central Bank may encourage credit expansion or contraction by exercising qualitative control over credit granted by it to member banks. It may refuse assistance if it is not satisfied that proper use will be made of it by the member bank concerned. In other circumstances it may be less discriminating.

Bankers are constantly lending money for transactions in stock exchange securities. Changes in margin requirements on stock exchange loans are " powerful instruments of credit policy. " Stock exchange speculation would be discourged if banks were required to make advances not exceeding 40 per cent of the current value of stock exchange securities, instead of, say, 60 per cent.

9. (c) REGULATION OF INSTALMENT CREDIT AND MORTGAGE LOANS

In prosperous countries there is a considerable demand for durable consumers' goods, such as motor cars, furniture, radio sets etc. Very often these goods are sold on credit—there is a down payment and monthly or weekly instalments continued over a period (amortization period). Such credit transactions are not affected by the rate of interest. But if down payment percentage were lowered (or raised) and the amortization period extended (or reduced) the scale of durable consumers' goods will increase (or decrease).[4]

The League Report on Depressions suggested that instalment credit policy should be co-ordinated and integrated into the general credit policy of the monetary authorities of each country as an instrument for dealing with booms and depressions.

10. LIMITATIONS OF THE DISCOUNT RATE

When the Central Bank deals directly with member banks, by borrowing money from the Central Bank the member banks may defeat the attempt of the Central Bank to reduce their assets by selling securities. Again, when the Central Bank is attempting to increase the volume of credit, the effect intended to be produced by the purchase of securities may be neutralised by the repayment of loans taken previously. In the year 1932 the Federal Reserve Bank of America bought 1,077 million dollars' worth of United States Government securities. The object was to increase the cash resources of the member banks and thus to bring about credit expansion. But the member banks repaid their indebtedness to the Reserve Banks to the extent of 798 million dollars, 21 million dollars' worth of gold was exported, 88 million dollars' worth of currency was withdrawn for hoarding, and the member banks' reserves increased by only 170 million dollars. For the success of the Central Bank's credit policy member banks' willing co-operation is essential.

What is more important, the direct sphere of influence of the bank rate is getting more and more restricted in the most advanced countries. A great proportion of capital used by industrialists in such countries comes from accumulated profits, or from insurance and building societies and other institutions specialising in long-term lending. The volume of long-term borrowing has increased as compared with short-term borrowing. "A century ago, a change in the Bank rate would directly influence the cost of the great bulk of business borrowing."[5]—not so much to-day. Assuming that the Central Bank effectively controls the money market, the importance of the Bank rate is greater in less highly capitalised countries. The borrówing most affected by changes in short-term rates in more advanced countries is the financing of stocks of commodities.

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[4] *Economic Stability in the Post-war World*, p. 160.

[5] Ibid. p., 156.

The League Report also mentions two other factors. Suppose the commercial banks are accustomed to work with a stable cash reserve ratio. Then even a relatively small change in their cash reserve would result in multiple purchases or sales of certain assets. For example, the cash reserves of the London Clearing Banks rose from an average of £182 millions in 1931 to an average of £215 millions in 1935, an increase of £33 millions in cash reserves. Over the same period their holding of securities increased from £301 millions to £615 millions, or by £314 millions.

Secondly, commercial banks of certain countries also attach importance to a stable ratio of quick assets (*e.g.*, call loans and Treasury bills) to deposits. If a bank is working, for example, to a 30 per cent ratio of cash, call money and Treasury bills to total liabilities, and if Treasury bills become scarce owing to funding operations, the addition to commercial banks' cash reserves will fail to produce the expected multiple expansionary effect. The expansionary effect will not materialise as the commercial banks are unable to work to their accustomed ratio of quick assets to deposits.

The enormous growth of public debt due to the last war will affect open market operations. When interest rates rise, the prices of fixed interest securities fall. Now banks are large holders of Government securities, and monetary authorities will hesitate to take action to lower the prices of fixed interest securities in prosperous periods.

CHAPTER V

INTERNATIONAL ASPECTS AND STRUCTURAL FACTORS

1. THE FINANCIAL CRISIS OF 1907

The League Report on Economic Depressions says: "Cyclical fluctuations in business activity in an economically integrated world are not a national but an international phenomenon, and require not only national but international action."[1]

Booms and slumps, wherever they may originate, tend to spread from one country to another. The best example of this is the Great Depression, but some of the crises which occurred earlier were also world crises. The American financial crisis in the autumn of 1907 caused "general monetary stringency all over the world."[2] In India it added intensity to a partial failure of the summer monsoon in 1907, and weakened the exchange position. The sale of Council Drafts in London ceased and, for the first time, Reverse Councils were sold in India. During the exchange crisis over £8 million was withdrawn from the Gold Standard Reserve in London to meet the Reverse Bills sold in India. The United States suffered a fall both in exports ond imports, but it is remarkable that the difference between exports and imports actually increased in favour of exports. The excess of exports over imports increased from 500 million dollars in 1907 to 636 million dollars in 1903. "The United States," says Jean Lescure, "sought markets abroad which they did not find at home."[3] The American crisis had repercussions on Germany. The German mercantile marine, and the machine-making and textile industries suffered losses, but the fall in the value of industrial securities quoted on the stock exchanges was moderate. The Reichsbank raised its rate of discount to 7½ per cent and the rate for advances to 8½ per cent.

The Bank of England raised the Bank rate to 8 per cent. The fall in British exports was general. Industrial profits fell and there was unemployment. The unemployed staged demonstrations in the wealthy quarters of London.

As for France, M. Jean Lescure says: "We may repeat for France what we have said about England."[4] The production of minerals contracted, and so also that of iron and steel. In a porcelain works, which was seriously hit by the crisis, hours of work were reduced by agreement between the employees and the management to 3 per day, and thus 1400 workers were saved from being discharged. The value of both exports and impart contracted.

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[1] P. 17.

[2] Report of the Indian Currency Commission, 1914, para 39.

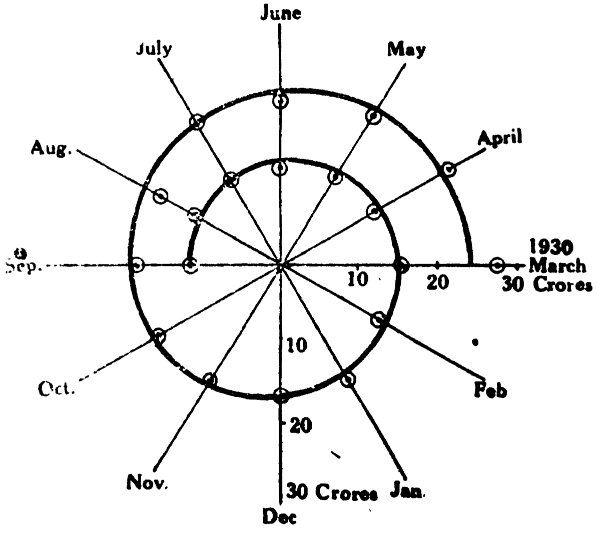
[3] "Des Crises Gènèrales et Périodique de Surproduction," p. 235.

[4] Ibid, p. 246.

2. THE GREAT DEPRESSION

The Great Depression began in the West, but India was one of the worst sufferers. The terms of trade turned against India and both exports and imports fell heavily. The value of surplus exports of merchandise fell from 151 crores in 1925-26 to 31 crores in 1931-32 and one crore in the following year. We left the gold standard on the same day as Britain, 21st September, 1931. The consequent rise in the price of gold tempted peasants in distress to sell their hoards of the metal. Net exports of gold between 1931-32 and 1939-40 exceeded 382 crores, and but for these gold exports, for which there is no parallel in our history, it would have been impossible to maintain the 18d. sterling exchange. The burden of agricultural debts and taxation increased heavily and many a land-revenue payer in those days paid Government dues by selling the ornaments of his wife and children.

CHART 12



Showing the contracting spiral of Indian exports from March, 1930, to September, 1931. The fitted curve has the equation :

$$\text{Log } r = 1{\cdot}218574 - {\cdot}018245\, \theta$$

Actual exports fell from Rs. 27.4 crores in March, 1930 to Rs. 11.6 crores in September, 1931.

When W. S. Jevons wrote agricultural conditions in India might have had a share in bringing about trade fluctuations in England. The situation changed entirely after 1905. Our currency system tied us to the chariot wheels of the world economy, and we could not remain unaffected by booms and slumps elsewhere.

The Finance Member of the Government of India (Sir George Schuster) thus referred to the New York Stock Exchange crisis: "The collapse seems likely to result in a period of business stagnation in America, which has already produced a serious fall in the price of all commodities. While the effect of these events on monetary conditions in India has been apparent throughout the year [1929-30], the effect of the fall in prices on trade is only now beginning to be felt." It was not so much the reduction in the quantity of agricultural produce exported as the fall in prices which ruined our peasants.

3. FALL IN NATIONAL INCOMES

There is no comparison between the crisis of 1907 and that of 1929-32 whether in point of intensity, or duration, or scope, or the havoc caused. The wide sweep of the Great Depression may be judged from the following figures [5] showing the heavy fall in the national income of 24 countries in the depression year:

Country	National income in 1932 or 1933 as % of 1929	Country	National income in 1932 or 1933 as % of 1929
Australia	69	Ireland	87
Austria	77	Japan	86
Belgium	73	Netherlands	74
Bulgaria	63	New Zealand	74
Canada	55	Norway	86
Czechoslovakia	59	Poland	55
Denmark	92	Roumania	49
Estonia	65	Sweden	84
Finland	76	Switzerland	65
France	81	United Kingdom	88
Germany	59	U. S. A.	49
Hungary	63	Yugoslavia	46

India is not mentioned in the Table, but the fall of prices indicates in some measure the contraction of our income.

Percentage decline of prices in India on the basis of September 1929 (=100)

	December 1932.
Rice	55
Wheat	34
Tea	56
Oil-seeds	55
Jute, raw	58
Cotton, raw	39
Hides and Skins	46
Jute manufactures	43
Cotton manufactures	30
Metals	20
Sugar	15
All commodities (including pulses, etc.)	38

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[5] "The Transition from War to Peace Economy" (League of Nations) p. 21.

The general average, 38, is somewhat misleading, for, from the point of view of agricultural income all commodities are not of equal importance. On the whole it would not be surprising if our income at the bottom of the depression was reduced to appreciably less than one-half as compared with 1929.

The League Report estimates the loss of money income in the 24 countries considered at 60 billion dollars in 1932 alone. The loss of real income produced was less, " but much of the agricultural produce was never sold and rotted on the farms."[6] At the depth of the depression the number of unemployed industrial workers throughout the world rose to 25 million. The number of partially employed agricultural workers might easily have been two or three times this figure.

The Great Depression disintegrated " the whole structure of international economic life."[7] World trade contracted by two-thirds. The last citadels of free trade fell. The international gold standard disappeared, and the economic system of which the gold standard was the visible symbol, *laissez faire*, vanished as if it never had been.

A new economic system arose on the ruins of *laissez faire*, a system of managed trade and controlled money and exchanges.

It should be clear that business cycles, when they can produce such wide-spread and dreadful chaos, cannot be treated as a national problem which may be solved by appropriate changes in national policy.

It may next be shown that the role of agricultural countries in the Great Depression was not entirely passive.

4. DEBTOR AND CREDITOR RELATIONS

Geoffrey Crowther, in his well known and deservedly popular work " An Outline of Money " distinguishes six stages in the development of international debtor-creditor relations. For our purpose it will be sufficient to note that borrowers are generally less advanced countries with an agricultural economy, and lenders, highly industrialised countries. The latter have resources to lend or invest in other countries. The investment provides a means of economic development to backward countries and brings profit to the creditor. An international loan thus possesses the quality of mercy—it blesseth both him that giveth and him that receiveth.

The mechanism of international lending and borrowing is intimately connected with that of credit and exchange.

When we raise a loan in England, exchange will tend to move in our favour, for the loan places us in funds with which we might reduce our foreign indebtedness. Formerly when a loan was raised in England, the Secretary of State was able to reduce the amount of Council bills sold and use the proceeds of the loan to meet the

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[6] Ibid, p. 21.

[7] Ibid, p. 22.

"Home charges." Reduction in the sale of Council bills tended to raise the exchange value of the rupee. At present reduction in the sterling purchases of the Government of India has the same effect on the rupee exchange.

A loan raised abroad increases the purchasing power of the borrowing country. If gold is imported, it may be used for creating additional credit. In our case, a part of the loan, in the shape of gold or British securities, may be added to the Currency Reserve permitting the issue of more notes.

The creation of additional credit in debtor countries would stimulate trade and industry. Prices would tend to rise, imports would increase, new industries founded, old industries strengthened and enlarged and large public works undertaken. Thus a steady stream of gold flowing into debtor countries may give rise to boom conditions.

A part of the capital borrowed is generally spent in the creditor country on machinery, railway material and other goods. Employment is thus created in the lending country and the industries concerned are enabled to expand. A country, then, which exports capital on a large scale would be industrially prosperous, with high wages and a high standard of living. The increase in her purchasing power, due to the expansion of constructional and other industries, would enable her to buy more food and raw materials from debtor countries.

But the whole mechanism of international investments is a delicate one. When it is suddenly subjected to a severe strain it may break.

5. WHEN FOREIGN CAPITAL BECOMES "HOME-SICK"

During 1924-29 the United States and England, respectively, made loans to South America approximating 1,200,000,000 dollars and £ 50,000,000, of which the small Republic of Columbia received 170,000,000 dollars. "There was a great boom. Competitive railway building and other public works sent up wages by leaps and bounds; imports vastly increased; food was imported where before it had been produced locally. When the golden stream ceased, there was a collapse. Imports ceased and Columbia thus added its small quota to depression in the industrial countries."[8] The same thing happened in Brazil, Peru, Chile, probably in the Argentine and "certainly in Australia."

But why should the golden stream cease to flow?

Suppose on account of technical advance in agriculture, production increases so much that food-stuffs and raw materials, the products of debtor countries, cannot be sold at remunerative prices. Prices fall, profits vanish, the credit of borrowing countries contracts and the golden stream ceases to flow. Not only would the creditors not make fresh loans to agricultural countries, but insist on the payment of old debts. Under such conditions foreign capital becomes "home-sick" (*Heimweh des Kapitals*). The sudden recall of foreign capital may throw the currency systems of debtor countries into confusion.

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[8] Macmillan Report, p. 80,

The creditor countries themselves cannot escape injury. If the purchasing power of debtors shrinks, their demand for imports from creditor countries would fall. First the constructional industries would be affected and gradually the depression would spread to other industries. The figures of the unemployed would mount up. As the situation grows worse, more countries would become involved in the general chaos and ruin.

This is precisely what happened in 1929-31

The first world war turned the United States into a creditor country. France began to export capital in 1921 and soon after the War England assumed her old role of an international lender on a large scale. Germany had lost all her foreign assets and became an importer of capital.

6. UNITED KINGDOM AND U. S. A. AS LENDERS

Between 1923 and 1929 about equal amounts were invested abroad by the United Kingdom and the United States—about 3,000 million dollars.

The income of the United States earned abroad in the form of interest in 1928 has been estimated at 5.7 dollars per head of the population, and of England no less than 29 dollars. The obligations on account of interest of some debtor countries, particularly those exporting food-stuffs and raw materials, were as shown below :—

Net interest owed abroad per head of the population in 1928 :—

	Dollars
New Zealand	27.6
Australia	27.5
Canada	22.3
Argentine	17.4
Union of South Africa	9:8
Norway	6.7
Denmark	3·8
Hungary	3.0

It can be easily understood that agricultural countries with heavy foreign obligations found themselves in a position of great difficulty when the prices of their products began to fall. Gold imports declined and ceased, and finally gold began to flow in the direction of creditor countries.

7. COLLAPSE OF THE GOLD STANDARD

Between 1928 and 1930 there was a fall in the gold reserves and foreign assets of the following countries, all of which had been hit hard by the fall in the prices of food-stuffs: Argentine, Australia, Brazil, Canada, Columbia and Hungary. The crisis in raw materials affected the following countries: Bolivia, Egypt, Eucador, India, Mexico, Dutch East Indies, Peru, Uruguay, and Venezeula.

Before the abandonment of the gold standard by England towards the end of September 1931 the following countries had already suspended the gold standard officially: Uruguay (December 1929), Argentine (December 16, 1929), Australia (December 17, 1929), and Mexico (July 25, 1931). In addition, the currencies of the following countries had depreciated in relation to gold before September 1931: Turkey, Spain, Paraguay, New Zealand, Venezeula and Bolivia.

The League of Nations' *Economic Survey* for the year 1931-32 referred to the steady and continuous fall in the prices of raw materials and food-stuffs and said: "The financial crisis which followed made it abundantly clear that it was the plight of the debtor countries, at once a main cause and the consequence of falling commodity prices, that was the darkest spot in the almost universal depression."[9]

As the economic situation in debtor countries grew worse, their demand for manufactured imports heavily decreased, which led to a further fall in commodity prices. The plight of the debtor countries was thus both a main cause and the consequence of falling prices.

8. STRUCTURAL CHANGES IN DEMAND AND SUPPLY

The League Report on Economic Depressions, Part II, distinguishes three types of depressions, cyclical, chronic and structural.

Cyclical depressions are a phase of the business cycle and their duration is about two years.

Mature industrial countries, it is also stated, suffer from a chronic type of depression, sometimes called secular stagnation. Chronic depressions are attributed to a permanent tendency to over-saving in rich industrial countries. Savings exceed investment, which brings about a fall of prices and causes widespread unemployment. Depressions due to over-saving would not occur if consumption expenditure increased side by side with the growth of saving.

Of the greatest interest to us in the present discussion are structural depressions which are due to structural changes in the conditions of demand and supply. These structural changes are not related to conjunctural expansion or contraction of credit, or the rhythm of business life, but to more fundamental alterations in the structure of economy. Arts of production change, there is biological progress which increases the yield of crops, and there are changes in consumers' tastes. Such changes may produce mal-adjustments of various kinds, upsetting the old equilibrium.

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[9] P. 222-23.

These mal-adjustments may coincide with cyclical set-backs, and then they are perfectly capable of producing chaos on a world-wide scale. This was indeed what happened in 1929-31.

It took a few years after the conclusion of the first world war to restore economic order and to get land back into cultivation on the continent of Europe. Gradually cereal production of the world began to increase and cereal productive capacity ended by becoming excessive. " The inevitable pressure on world markets, " says the League Report on Economic Depressions, Part II, " was accentuated on the one hand by the technical progress in the West, the growing mechanization of agriculture, the development of new strains of wheat, etc., and on the other hand, after 1926, by the imposition of higher tariffs in Europe and by the reduction in the cereal consumption per head of the Western European peoples. "[10]

With the growth of civilization there is a tendency in European countries to consume less wheat. It is estimated that between 1916 and 1928-29 the consumption of wheat flour per head of the population in the United States fell by 15 per cent.

9. STRUCTURAL AVERSION TO BREAD

Dr. Guenter Keiser described this interesting situation as a " tendency towards a structural aversion to the use of bread,"[11] and said that this tendency was observable in all countries. Not yet in India. Our masses have not yet become so highly civilised as to regard bread with aversion.

The development of wheat production in European countries which formerly imported wheat, took place behind tariff walls. The result was to change the character of the world wheat market, the existence of which had never been questioned before. A world wheat market still existed, but it was a market in which domestic prices were different in different countries, the differences being due, not to cost of transportation, but heavy import duties. Dr. Guenter Keiser had good reasons to ask ' *Gibt es noch einen Weizenweltmarkt ?*, (Does a world wheat market still exist ?) In the *World Economic Survey*, 1931-32, attention was called to the wide variations in wheat prices in different parts of the " world " market, and their inharmonious rise and fall. For example, between January 1929 and January 1932, the price of wheat, reckoned in United States cents per bushel of 60 lbs., fell in Agentine from 113 to 44 cents (61 per cent), and in India from 158 to 60 cents (62 per cent), but it rose in Germany from 135 to 147 cents, and in France from 164 to 179 cents. The lowest price in the same month (January 1932) was 44 cents in Argentine and the highest 179 cents in France.

All this meant a change in the structure of the market, which inevitably reacted on the price of wheat.

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[10] P. 35.

[11] W. D. for May 11 and 18, 1934.

10. SUGAR AND OTHER COMMODITIES

The case of sugar is regarded as typical. After a set-back, the sugar industry rapidly revived in 1923-25. In Java a new variety of cane was produced which increased the yield of sugar by 30 per cent. " Hence, from 1925, prices obtained by exporters were unprofitable . . ."[12] One may speak of over-production of sugar, as of wheat, The price per lb. of raw sugar was about ½*d.* in 1930, compared with 1¼*d.* in 1925 and 2*d.* in 1923.

The League Report cited above also draws attention to changes in the sources and uses of raw materials. For the future wool and cotton are likely to feel increasingly the pressure of the competition of artificial fibres. The cost of synthetic rubber is likely to fall with scientific progress. The plastic industry will compete with a constantly increasing range of agricultural and mineral products. Some of these influences were beginning to be felt even before 1929.

11. INDUSTRIAL DEVELOPMENT OF BACKWARD COUNTRIES

More important for the purposes of the present discussion is the industrial development of backward countries. Geographical shifts in industrial development, or a wider diffusion of industry throughout the world is, a structural change in the world economy which is not without significance in the study of depressions. The industrial progress of the world in certain years before 1931 is shown by the following statement :—[13]

Index Numbers of Industrial Production.
1913 = 100

	1919	1929	1931
Industrial Europe ...	...	120	98
U. S. A. ..	123	171	115
Canada ...	128	234	166
Australia ..	103	150	133
New Zealand ...		148	...
India ...	140	182	200
Japan ...	200	323	303
Argentine ...	110	143	...
Brazil ...	...	235	...
Chile ...	...	153	132

The percentage increase in 1929 in the case of India, Japan, Canada and Brazil was heavy. It may, however, be remembered that, excepting Japan, the total volume of industrial production in agricultural countries like India, Brazil, the Argentine and Canada was small. Still the growth of industrial production in agricultural countries is of some significance from the point of view of world economy. It will also be noted that in 1929, as compared with 1913, there was an increase of 20 per cent in the industrial production of industrial Europe and no less than 71 per cent in that of the United States.

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[12] League Report on Economic Depressions, part II, p. 35.

[13] W. A. April, 1933, p. 345.

More recent figures are given below :

Indices of Industrial Production.
Average for 1936-1938. 1929 = 100

Old Industrial Countries		New Industrial Countries	
France ...	79	Poland ...	106
Belgium ...	88	New Zealand ...	130
U. S. A. ...	93	Chile ...	131
Germany ...	115	Finland ...	150
United Kingdom ...	118	Greece ...	152
Sweden ...	146	Japan ...	165

As a result of the second world war, Japan has ceased to be a Great Power, and, very probably, she will also lose her status as the greatest industrial country of the East. But the pace of industrial development in both China and India will quicken. The exact degree of industrial progress in the new industrial countries does not matter. What matters is the structural change in the world's industrial organisation which we are witnessing to-day, and which began after the first world war.

CHAPTER VI

OVER-PRODUCTION AND UNDER-CONSUMPTION

What light do the facts stated in the preceding chapter throw on the disputed question of over-production? They seem to point to over-production and the consequent fall of prices as a cause of the Great Depression. But eminent economists have totally denied the possibility of over-production.

1. CONSUMPTION GROWS AT THE SAME PACE AS PRODUCTION

Professor Gustav Cassel characterises the belief that the capacity for production may develop faster than that for consumption as "superstitious," arising from "a very defective understanding of the mechanism of uniform economic progress." In the "normal state of development," we are told "consumption grows at the same pace as production," which is also supposed to be true of saving and the creation of fresh capital. "It is very deplorable," says Professor Gustav Cassel, "that a great part of the world's financial press is ignorant of such an elementary truth."[1]

It is also an elementary truth that even in a planned economy, mistakes may be made in estimating demand or supply, and production may therefore exceed or fall short of effective demand. A capitalist economy is not a planned economy. When a capitalist economy is of world-wide extent, and producers and consumers are separated by enormous distances, all forms of mal-adjustments are theoretically conceivable and actually possible.

2. OVER-PRODUCTION AS A "MIS-CONCEPTION"

Like Professor Gustav Cassel, Professor Lionel Robbins regards over-production in the pre-crisis years as a "mis-conception;" he seems to favour the explanation of the Great Depression in monetary rather than non-monetary terms. In regard to the effects of "over-production" he says:

"Let us suppose that, owing to technical progress, the supply of wheat increases. Let us suppose further that, owing to the relatively inelastic nature of the demand for wheat, the price of wheat falls more than proportionately, and the producers of wheat have therefore lower incomes. Does this mean that much purchasing power will have disappeared from the world? Not at all. It is true that the wheat producers will have less to spend, but the consumers, who now get more wheat for a smaller outlay, will have more money left over. It may very well be that they will not spend this increase on exactly the same things that the wheat producers would have purchased. But they will be in a position to buy more of something; and this will render any reshuffling of the labour force which the changed direction of demand makes necessary, a comparatively easy process."[2]

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[1] *The Crisis* etc, p. 57.

In the year 1924-25 wheat exports from India were valued at Rs. 17 crores and the quantity exported exceeded one million tons. In 1931-32 we exported 20,215 tons of wheat in all, valued at Rs. 15 lakhs, or wheat exports disappeared. The over-production of wheat in the world and the cessation of wheat exports from India combined to reduce the price of wheat by about two-thirds and the purchasing power of our peasants decreased heavily.

Does it mean that the purchasing power lost by our peasants disappeared from the world? "Not at all," Professor Robbins would say. The world consumers of wheat gained. They were in a position to buy more of "something." We may assume that they did not hoard what they saved—Professor Robbins rules out altogether the possibility of hoarding of this sort. Well, then, industrial workers in manufacturing countries had more money to spend on "something." How did that benefit agricultural countries? A fall in the price of the more important agricultural products (or two only, wheat and cotton) impoverished millions of workers in agricultural countries.

It may be admitted that consumers of raw materials and food-stuffs in agricultural countries also gain by a fall in their prices; they may also buy more of "something." But the reshuffling of the labour force on account of the change in demand is "a comparatively easy process" only in "pure" theory. Only an infinitesimally small proportion of our starving peasants have found employment in manufacturing industries; the expansion of industrial production in foreign countries does not create employment for them.

The result in these circumstances is a heavy fall in imports, so that manufacturing countries do not escape injury. Exports of Indian merchandise declined from Rs. 330 crores in 1928-29 to Rs. 156 crores in 1931-32, and imports of foreign mechandise from Rs. 251 crores to Rs. 126 crores in the same period. An unprecedented contraction of world trade was the inevitable consequence of the Great Depression, or the crisis spread from agricultural to manufacturing countries.

3. UNDER-CONSUMPTION

Among non-monetary theories of the Trade Cycle two deserve special mention. The over-saving or under-consumption theory, which has many advocates, and the theory of deficiency of purchasing power associated with the name of Major Douglas of social credit fame. We begin with under-consumption.

Most socialist writers uphold the under-consumption theory in one form or another. We may notice three, Kar Marx, Rodbertus, and J. A. Hobson.

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2. *The Great Depression*, pp. 15-16

In a capitalist economy, according to Marx, there is growing concentration of capital in fewer hands as accumulation proceeds. There are two constituents of capital, which Marx called (*a*) "fixed" or constant capital, and (*b*) variable capital. By variable capital Marx means that portion of the total capital which is paid to labour as wages; all other capital is "fixed" or constant capital. As production expands, the proportion of variable to fixed capital changes. Social wealth increases, but the proportion of wealth going to labour progressively diminishes. As more and more capital is invested in industries, the proportion of fixed or constant capital to variable capital progressively rises. Suppose the proportion of fixed to variable capital in the beginning was 1 : 1. With the development of capitalism it becomes 2 : 1, 3 : 1, 4 : 1, 5 : 1, 7 : 1 etc., so that as capital grows, instead of half of its total value only, 1/3, 1/4, 1/5, 1/7, etc., is transformed into labour-power, and 2/3, 3/4, 4/5, 6/7, etc., into means of production. Variable capital may increase in the absolute sense, but what we are concerned with is its proportion to constant capital, which sinks continually. Suppose variable capital increases from 1 crore to 2 crores. But if constant capital has increased from 1 crore to 6 crores, the proportion of variable to constant capital has fallen from 1 : 1 to 1/3 : 1.

Thus, according to Marx, in a capitalist society the rate of growth of capital is more rapid than that of the product of industry assigned to the labouring population as wages. Consuming power fails to keep pace with the productive power of the community. When this happens, there will be goods, but no purchasers.

Rodbertus. While he had his differences with Marx, Rodbertus similarly believed that rent and interest swallowed up the major portion of the gains from progress. While the share of the product of industry claimed by landlords and capitalists grew with improvements in the arts of production, the worker had to content himself with a relatively decreasing proportion. This tendency was formulated by Rodbertus as the Law of the Falling Wage-share (*Gestz der Fallenden Lohn-quote*). Rodbertus proposed that productivity should be considered in determining the normal day's work (normale Tage-work), taking the daily hours of work as 10. As the result of progress, the normal day's work would come to represent a higher level of productivity. Real wages must correspond to and measure such increase in productivity. They will not do so automatically. "In any case this does not happen of itself. Of itself is fairy-land, lotus-land" (*Von selbst ist Fabelland, schlaraffenland*).[3]

J. A. Hobson in his interesting study of *Imperialism* returns to the same theme. Why is the possession of foreign territory prized by an Imperialist country? Why are there Imperialist wars and conquests? Dependent countries provide markets for the surplus products of the mother-country. There is great inequality in the distribution of incomes, as the result of which there is over-saving by the rich, and over-investment:—

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[3] *Ausgewaehlte Lesestuecke* edited by Diehl and Mombert, Sozialismus, etc. Vol. 1, p. 183 (Karlsruhe, 1920).

"But it may be asked, 'why should there be any tendency to over-saving? Why should the owners of consuming power withhold a larger quantity for savings than can be serviceably employed?' Another way of putting the same question is this, 'Why should not the pressure of present wants keep pace with every possibility of satisfying them?' The answer to these pertinent questions carries us to the broadest issues of the distribution of wealth."[4]

Hobson mistakenly believed that if incomes were less equally distributed in Britain, the home demand would increase sufficiently to keep all workers employed in Britain:—

"It is this economic condition of affairs that forms the taproot of Imperialism. If the consuming public in this country raised its standard of consumption to keep pace with every rise of productive powers, there could be no excess of goods or capital clamorous to use Imperialism in order to find markets: foreign trade would indeed exist, but there would be no difficulty in exchanging a small surplus of our manufactures for the food and raw material we annually absorbed, and all the savings that we made could find employment, if we chose, in home industries."[5]

Imperialist domination of one country by another has much deeper roots. And, thanks to invention and progress, productive power has increased so enormously that in the absence of a large foreign demand, or in the absence of a fairly high level of exports, such increase in demand as may result from a less unequal distribution of wealth in Britain, could not possibly absorb all British production of consumers' goods. We assume that the population of Britain is a growing population. If a decline set in, the difficulties of British industry would increase.

If incomes became absolutely equal, savings would shrink enormously, and an equilibrium might be easily established between consumption and production. But in that case the British worker must reconcile himself to a lower standard of living.

J. M. Keynes would seem to believe in the under-consumption theory. For what is under-consumption, viewed from the point of view of society as a whole, except a fall in the propensity to consume, and a rise in the propensity to save? Now the propensity to consume is of a higher degree in the poorer sections of a community, and of a lower degree in the upper or richer strata of society. If my income is Rs. 50 a month, my propensity to save is of little consequence, for my power to save is almost entirely negligible. But if my income rose to Rs. 5,000 a month, with a high propensity to save I would save a considerable proportion of my income. The actual saving effected depends not only on the propensity to save but the power to save, and with the growth of national income, savings mount rapidly.

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[4] *Imperialism*, pp. 82-3.

[5] *Ibid* p. 81.

The 'Multiplier' and the public works programme suggested by Keynes also lead one to think that he accepted the under-consumption theory, at least partially. For the efficacy of the Multiplier is dependent on the fraction saved, the Multiplier being the reciprocal of this fraction. The higher the propensity to consume, the lower would be this fraction, and the greater the multiplying effect of the increase in consumption in augmenting national income and creating employment.

But there is a difference between Keynes and most writers of the "under-consumption" school. The latter would reduce investment, while taking measures to stimulate consumption. Keynes, on the contrary, was "impressed by the great social advantages of increasing the stock of capital until it ceases to be scarce." But he readily conceded that the wisest course was "to advance on both fronts at once :—"[6]

"Whilst aiming at a socially controlled rate of investment with a view to a progressive decline in the marginal efficiency of capital, I should support at the same time all sorts of policies for increasing the propensity to consume. For it is unlikely that full employment can be maintained, whatever we may do about investment, with the existing propensity to consume. There is room, therefore, for both policies to operate together; —to promote investment and, at the same time, to promote consumption, not merely to the level which, with the existing propensity to consume, would correspond to the increased investment, but to a higher level still."

Increase in investment lowers the marginal efficiency of capital and Keynes thought that, under certain conditions, the marginal efficiency of capital in a country whose population was not increasing, might be brought down to zero within a generation. Keynes principally relied on the control and direction of investment with the object of lowering the marginal efficiency of capital for securing full employment, but he did not ignore consumption. Socialist and other upholders of the under-consumption theory, on the other hand, would make the distribution of wealth less unequal so that while the community's propensity to consume increased, the savings of the richer sections of the community and investment grew smaller.

4. SOCIAL CREDIT

The social credit movement was started by Major Douglas, an engineer. His main theme is deficiency of purchasing power but, curiously enough, he is not interested in a better distribution of wealth. Major Douglas argues that payments made to individuals in the shape of wages, salaries and dividends are not sufficient to cover all payments which enter into prices. The result is a deficiency of purchasing power which, he suggests, may be made good by means of rebates to consumers on their purchases, naturally at the cost of the State. Major Douglas's famous A and B theorem is best expressed in his own words:

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[6] *General Theory*, p. 235.

" A factory or other productive organisation has, beside its economic function as a producer of goods, a purely financial aspect—it may be regarded on the one hand as a device for the distribution of purchasing-power to individuals through the media of wages, salaries, and dividends; and on the other hand as a manufactory of prices—financial values. From this standpoint its payments may be divided into two groups :—

Group A: All payments made to individuals (wages, salaries, and dividends.)

Group B: All payments made to other organisations (raw materials, bank charges, and other external costs),

" Now *the rate of flow of purchasing-power to individuals is represented by A, but since all payments go into prices, the rate of flow of prices cannot be less than A plus B. The product of any factory may be considered as something which the public ought to be able to buy, although in many cases it is an intermediate product of no use to individual but only to a subsequent manufacture ; but since A will not purchase A plus B, a proportion of the product at least equivalent to B must be distributed by a form of purchasingpower which is not comprised in the descriptions grouped under A.*"

Obviously if the consumers' resources amount to A, while the payments amount to A *plus* B, there is a deficiency of purchasing power.

5. EXAMPLE OF *A* AND *B* PAYMENTS

But do the payments which the consumer is called upon to make amount to A *plus* B. Let us take an example.

Iron ore is mined, turned into steel products by manufacturers, and then sold to wholesalers, who sell it again to retailers. The consumer is concerned with the finished product in the hands of retailers only. Let us divide the payments at each stage into A and B payments.

	A Payments to individuals in the form of wages, salaries, dividends.	*B* Payments to others for raw materials, bank charges and other external costs.
Miners	2 lakhs	...
Manufacturers	6 lakhs	2 lakhs
Wholesalers	1 lakh	8 lakhs
Retailers	1 lakh	9 lakhs
	10 lakhs	19 lakhs

In the case of miners we assume, for the sake of simplicity, that there are no external or *B* payments. At the next stage, the manufacturers must pay 2 lakhs for their raw material. Having turned iron into finished steel products, the manufacturers sell them to wholesalers, whose external payments amount to 8 lakhs. Finally, the retailers pay 9 lakhs to wholesalers as the price, and the consumers pay 1 lakh extra for retailers' services. The total of *A* payments is 10 lakhs and of *B* payments 19 lakhs. $A+B=29$, while the consumers' purchasing power is equal to 10 lakhs only. There is thus a deficiency of 19 lakhs. This is the gap in the circular flow of money which Major Douglas would close by his " social credit."

It will be seen that Major Douglas does not complain of inequality in the distribution of income. His position would have been unassailable if he had said that while the price of finished goods was 10 lakhs, the total income available for consumers' expenditure on the goods concerned was less than that sum. He approaches the problem from another angle. The sum total of *A* and *B* payments is 29 lakhs, while the consumers have only 10 lakhs to spend. What is his error ?

The sum of 10 lakhs which the consumers do spend pays all costs ; it suffices to make the total of *A* and *B* payments.

Let us begin from the consumers' end. They pay 10 lakhs to retailers, out of which the retailers retain 1 lakh for their own services and pay 9 lakhs to wholesalers, and so on until the miners receive 2 lakhs for their services from the manufacturers. 10 lakhs may make payments aggregating not only 29 lakhs but ten times that amount. If a rupee changes hands 10 times, it will make payments amounting to ten rupees. In our illustration some of the rupees change hands more than once.

But suppose we begin from the producers' end. Then the manufacturers may be supposed to borrow 2 lakhs from banks in order to pay the price of their raw material (*B* payment). Similarly wholesalers may obtain 8 lakhs and retailers 9 lakhs on credit from banks. When, for example, retailers repay their loan to the bank, the loan is cancelled. Major Douglas would say that here was a *B* payment which represented a loss of purchasing power. But this purchasing power is not lost, unless we assume that the bank, as soon as the loan is repaid, disappears from the scene. A bank is constantly engaged in borrowing and lending, and as soon as one loan is repaid, it makes another. Thus the repayment of loans in the ordinary course of things signifies no loss of purchasing power. It is different when the propensity to save increases at the cost of the propensity to consume. The remedy lies in a better distribution of wealth, or, if we have faith in the Savings and Investment Theory, in stimulating Investment.

6. MAJOR DOUGLAS'S EVIDENCE

Let us next consider Major Douglas's solution, as he explained it to the Macmillan Committee. Again, it would be best to let Major Douglas speak for himself :—

"4439 (Chairman)

Question : I buy a motor car for £100 ; I pay £100 and get a receipt from the manufacturer of whom I have bought it, which vouches that I have paid him £100. I take it to my banker, do I ?

Answer : Yes.

4440

Question : And on production of that voucher for £100 he says, "I will credit you with £25 ? "

Answer : Yes.

4441

Question : The result is, I have only paid £75 for the car ?

Answer : Yes.

4442

Question : The banker collects the credit—£25 in this particular transaction, but, of course, there will be a great number of them, because every commodity will be subject to the same kind of, not necessarily discount, but abatement or rebate ?

Answer : Yes.

4443

Question : I do not get the £25 : it is credited to my account and the banker pays his voucher into the Treasury ?

Answer : The consumer has got the £25 ; that is really the mechanism. What you have got is a motor-car, which by present methods would cost you £100, for £75.

4444

Question : The banker then collects £25 from the Treasury ?

Answer : That is right.

4445 (Mr. McKenna)

Question : Where does the Treasury get its credit from ?

Answer : The Bank of England at the present time supplies the Treasury on Ways and Means Account with money out of the credit of the country. That is simply the creation of fresh money. That is the case I think.

4446

Question : That is a double debit to the Treasury. Where does the credit to the Treasury come in ? It owes one bank £25 ; what is on the other side ? (Mr. Lubbock) A liability which might be translated, I suppose, into currency notes ?

Answer : If the bank so desired.

4447 (Mr. Frater Taylor)

Question : It is your subsidy without taxation ?

Answer : It is your subsidy without taxation.

4448 (Chairman)

Question : The Treasury, under this happy doctrine, is going to pay 25 per cent of the cost of my car, is it not ?

Answer : No sir ; it is not. I shall have to take you back to the beginning, if you do not mind my labouring the point.

4449

Question : We are most anxious. We know your views have commended themselves in many quarters ?

Answer : Thank you ! I must apologise for being elementary.

4450

Question : You cannot be too elementary for me, I assure you.

Answer : The first point from which you have to start is this : you have at the present time an unused capacity for production. You cannot use it because you cannot sell ; that is point one. Point two is that your financial system is nothing but a ticket system ; it is not a matter of any importance whatever by itself ; therefore, if it is necessary to make adjustments in your financial system then those adjustments can and should be made. Now your difficulty at the present time is the difficulty that your purchasing power in relation to your prices is insufficient, so clearly you have to lower your prices, or increase your purchasing power ; to increase your money you really have to increase your purchasing power. The difficulty in discussing this subject is to keep very clearly in mind

> the difference between purchasing power and money. If you merely add to the amount of money you will probably not increase your purchasing power, because your prices will automatically rise. In order to avoid that difficulty one method by which it can be done is to lower your prices by means of a subsidy which does not come from purchasing power, which does not come from the public, which is already deficient in money, as compared with the collective prices."

The present writer shares the impression which Major Douglas's performance before the Macmillian Committee created in Hugh Dalton's mind. The impression was that of " an incurably muddle-headed witness, who has never really thought out either the theoretical or the practical implications of his proposals, but flounders under cross-examination from one confused evasion to another."[7]

The sum and substance of Major Douglas's proposal is that the State should present packets of "created money" to consumers in general in order to enable them to buy more. It is immaterial how consumers are actually assisted to buy more ; ultimately more money has to be created by the State, or the monetary authorities, for the purpose. The result must be an inflationary rise of prices. And prices, would rise cumulatively. For if the "rebate" or "subsidy" on a motor car was £25, when the price of the car was £100, it would have to be £30 when the price rose to £120. Social credit as expounded by Major Douglas would guide the community down the primrose path which leads to an unlimited rise of prices.

7. ALL COSTS ARE INCOMES

The possibility of general over-production has been disputed on the ground that the process of production itself generates incomes. Every cost is ultimately an income accruing to some one or other. To the spinner the price of raw cotton is a cost, but to the cotton grower it is an income. Yarn is woven into fabrics, the weaver incurring various costs in the process. Each one of these costs is a payment received by some one or other. If now all costs are incomes and nothing is hoarded, and if there is full employment, then, in a closed economy, there should be no deficiency of purchasing power. Thus runs the argument against the possibility of general over-production, and stated thus the argument is irrefutable. For we are assuming that all resources are fully employed, and that all costs are turned into incomes which are fully spent.

But all incomes cannot be made fully available for the purchase of consumers' goods. Suppose India represents a " closed economy." Food and other crops are raised and sold. The agricultural costs are covered by the prices. received for agricultural produce. The costs turn into incomes, wages of agricultural labourers, profits of peasant proprietors, interest paid to money-lenders and rent paid to landlords. But agricultural incomes are extremely unequal. Sometime ago Mr. H. Calvert wrote about the money-lender in the Punjab :

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[7] *Social Credit or Socialism* by W.R. Hiskett. pp. 5-6.

"He represents the richest single class. His profits probably exceed those of all the cultivators put together. Beside him, the professional class is inconsiderable, the industrial class is insignificant even trade and commerce take second place."[8]

The business of money-lending received a check during the Great Depression, and money-lending legislation completed the ruin of many money-lenders. But the non-working landlord, as an exploiter, has an equal rank with the money-lender—if not a superior rank. The Punjab Farm Accounts suggest that on an average of good, bad and indifferent years the share of the non-working landlord in the net profits of cultivation exceed 80 per cent.

This grave inequality of incomes is a basic factor in the situation. From this inequality there springs the insufficiency of purchasing power. The rich must save, for there are physical limits to increase in their consumption. This is true not only of landlords and money-lenders, but of other classes, who derive a considerable income from other sources. In their case saving is largely involuntary. All the costs are turned into incomes, but not into purchasing power which is available for consumption.

Nor is the situation saved by investment. Investment increases the productive power of a community by adding to the supply of capital goods. When these capital goods are made, additional incomes are created, but again on an unequal basis. Productive power or the supply of consumers' goods increases at a faster rate than the purchasing power available to buy them, with the inevitable consequence which are known.

8. BUFFER STOCKS

It may again be emphasised that the phenomenon of the Trade Cycle is not national but international. The solution must be sought not on national but international lines. The British Proposals for an International Clearing Union urged international action to control the Trade Cycle, and that is the only right procedure, assuming its practicability. The British White paper on these proposals stated :

"There are various methods by which the Clearing Union could use its influence and its power to maintain stability of prices and to control the Trade Cycle. If an International Economic Board is established, this Board and the Clearing Union might be expected to work in close collaboration to their mutual advantage. If an International Investment or Development Corporation is also set up together with a scheme of Commodity Control for the control of stocks of the staple primary products, we might come to possess in these three institutions a powerful means of combating the evils of the Trade Cycle, by exercising contractionist or expansionist influence on the system as a whole or on particular sections. "

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[8] *Wealth a Welfare in the Punjab*, p. 256.

The problem of buffer stocks has been discussed by the League Delegation on Depressions. The buffer stocks, managed by capable hands, might succeed in stabilizing the prices of primary products and thereby the incomes of primary producers. This is a question of supreme importance, not only from the point of view of agricultural countries but from that of highly industrialised countries. The economy of a country like the United Kingdom is unstable in the sense that industry is organised there to meet a demand far larger than the home demand. A decline of exports owing to causes beyond the control of British financiers and industrialists must subject their " open system " to very great stresses and strains. The demand of agricultural countries for the products of industrialised countries is largely determined by the level of agricultural incomes. When agricultural incomes contract owing to a collapse of prices, industrial systems of the leading countries would tend to be thrown out of gear.

Three suggestions have been made to create confidence in buffer stocks :

(*a*) The stocks should have an adequate financial backing.

(*b*) They should be so large as to preclude speculation on their exhaustion.

(*c*) They should be subject to a determined policy of price stability and not of maximum profits.

9. PRODUCTION CONTROL

Buffer stocks will eliminate or limit certain effects of cyclical influences. Production control, if it can be successfully carried out on a world basis, will limit certain effects of long-term or structural tendencies.

We gained some experience of production control during the war. But where agriculture is carried on largely as a mode of living, and not primarily for profit; where cultivation is on a small scale by innumerable peasants, each working independently, production control is difficult. Agriculturists do not abandon their farms simply because they have ceased to make a profit. This means that to ensure stability of prices the buffer stock agency might have to carry stocks in excess of what would otherwise be necessary. Again, it can also be easily understood that in a crisis governments cannot allow primary producers to be ruined by foreign or even domestic competition. Subsidies and tariffs begin to operate, which creates international complications.

Investment Control. An International Investment or Development Corporation might use the resources at its disposal to develop backward regions and thus to raise depressed standards of living. There are glaring inequalities in the standards of living of different peoples, and what is worse, restrictions on immigration tend to perpetuate these inequalities. A less unequal distribution of income between the nations of the world would be a powerful force working for international peace, security and stability.

PART II

THE INTERNATIONAL GOLD STANDARD

CHAPTER VII

THE FOREIGN EXCHANGES

In this part of the book we are largely concerned with the external value of money, which means the purchasing power of national money in terms of gold, or foreign currencies based on gold. There is an intimate connection between the external value of a currency and its internal value, or its purchasing power in terms of goods and services within a country. How the two are inter-related, and the consequences which arise from a disequilibrium between the internal and external value of money will be discussed later. We shall begin with the explanation of the rate of foreign exchanges.

The unit of money for the whole of British India is the rupee. We ignore the difference between the token silver rupee and the paper note, as this difference is of no consequence for our purposes. The silver rupee is a note printed on silver; it possesses some intrinsic value while the paper rupee possesses none at all. But both are unlimited legal tender throughout British India. Both are State money, or fiat money—their exchange value arises from their legal tender quality.

There is no difficulty in making payment in rupees in any part of British India. A remittance may be made through a money order, a postal order or a bank draft. For a given number of rupees paid by the remitter at one centre (*plus* commission) an equal number of rupees will be paid out at the desired centre by the Post Office or the bank concerned.

While every country possesses a national unit of currency, there is no international monetary unit. Gold is used in international trade for the adjustment of international accounts, but there is no gold coin which is commonly used in international payments. The world, however, has very narrowly missed having one. The United States proposals for a United and Associated Nations Stabilization Fund clearly contemplated the creation of an international monetary unit called *Unitas*. The accounts of the International Monetary Fund were to be kept in *Unitas*. This monetary unit was to consist of 137$\frac{1}{7}$ grains of fine gold, equivalent to 10 dollars of the United States. The value of the currency of each country was to be fixed by the Fund in terms of gold or *Unitas*. The British proposals for a Currency Union also envisaged the creation of international bank money designated *Bancor* (*or* is French for gold), the value of which was to be fixed (but not unalterably) in terms of gold. Both *Bancor* and *Unitas* have failed to materialise.

1. THE RATE OF FOREIGN EXCHANGE

A rate of exchange expresses the price of a currency unit of one country in terms of a currency unit of another country. For example, one rupee is equal to 18*d.* sterling (paper money not convertible into gold) ; 1 £ sterling = Rs.13⅓ (1 £ = 240*d.*).

When it is stated that one rupee is equal to 18*d.*, all that is meant is that by paying one rupee in India one can acquire the right to receive 18*d.* sterling in England. The price of 18*d.* sterling in India is one rupee, or the price of one rupee in England is 18*d.* sterling.

Let us take two countries, England and Germany before the Great War of 1914-18. The gold sovereign was the unit of British currency and the gold mark the unit of German currency. Both countries also used paper money, which was freely convertible into gold.

According to the mint regulations of England £1 gold, or a sovereign, contains 7.988 grammes of standard gold.

Standard gold is $\frac{11}{12}$ fine. Therefore a sovereign contains $\frac{7.988 \times 11}{12}$ grammes of fine gold.

According to the mint regulations of Germany 500 fine grammes of gold were equal to 1395 marks. It follows that one mark was equal to $\frac{500}{1395}$ grammes of fine gold.

We can now easily find the value of the sovereign in terms of marks.

$$1 \text{ sovereign} = \frac{7.988 \times 11}{12} \text{ grammes of fine gold.}$$

$$1 \text{ mark} = \frac{500}{1395} \text{ grammes of fine gold.}$$

$$\therefore 1 \text{ sovereign} = \frac{7.988 \times 11}{12} \times \frac{1395}{500} \text{ marks} = \frac{122.56}{6}$$

marks = 20.43 marks (nearly).

This rate expressed the value of the currency unit of Germany in terms of the currency unit of England.

2. BILLS OF EXCHANGE

Why is foreign currency bought? The answer is that if you have imported goods from England you must pay for them. Similarly British importers of Indian goods must pay for our goods.

Suppose an Indian merchant, whom we may call II (Indian Importer) has bought British cloth worth £1,000 from an English manufacturer named EE, and an English merchant called EI has imported Indian cotton, also worth £1,000, from an Indian exporter named IE. II has to pay for British cloth and EI for Indian cotton.

Gold is the medium of payment in foreign trade. Will II buy gold worth £1,000, pack it, insure it and send it to EE, the English exporter of cloth? Will the English importer of Indian cotton EI, similarly send £1,000 in gold to his creditor in India IE?

It is not necessary. There is a debtor and a creditor in each country. If they meet, no bullion need be sent by either country.

Payments in foreign trade are usually made by means of bills of exchange. A foreign bill of exchange is a foreign *hundi*—nothing more. A *hundi* is an internal bill of exchange.

A bill is drawn by a creditor on his debtor and it is accepted by the debtor. The debtor, by accepting the bill, acknowledges his obligation to pay it. If it is a sight bill, it is payable at sight. A cheque may be regarded as a sight bill—it is instantly paid by the bank on which it is drawn. A *darshani hundi* is paid by the person on whom it is drawn as soon as he has *darshan* of it. A *miyadi hundi* is paid on maturity, or after a certain period specified in the *hundi*.

For the present we may assume that bills used in foreign trade are sight bills.

IE, having sold cotton to EI worth £1,000, draws a bill on EI which EI, or somebody on his behalf, accepts. Now II has to pay £1,000 to EE the English exporter of cloth. II meets IE, buys the bill that IE has drawn on EI for £1,000, and sends it to his creditor in England, EE, with instructions to receive payment from EI. EE presents the bill to EI, the English importer of cotton, who pays the value of the bill. One bill of exchange, drawn by the Indian creditor and accepted by the English debtor, has paid two debts, and saved the cost of sending gold.

The rate of exchange quoted in the daily papers refers to the price at which foreign bills of exchange are sold.

3. HOW EXCHANGE IS QUOTED

Confusion will be avoided if the reader will try to remember that the price of sterling is quoted in India like the retail price of wheat, that is to say, in terms of the quantity obtainable for a rupee. One rupee buys 18*d*. of English money as it buys, let us say, four seers of wheat. It follows that sterling grows cheaper when more than 18*d*. are offered for a rupee and dearer when less than 18*d*. are obtainable for a rupee.

In London the rupee and the dollar are quoted differently, 18*d*. per rupee and 4.02 dollars per £. When more than 18*d*. have to be given in London for a rupee, the rupee becomes dearer, but when more than 4.02 dollars are obtainable for a £, the dollar has become cheaper.

In India a rise of the exchange rate above 18*d.* means a fall in the value of sterling and a fall in the exchange rate below 18*d*, a rise in the value of sterling.

4. THE MINT PAR

The exchange value of the rupee was fixed at 18*d.* gold in 1927, or one rupee became equal to 8.475 grains of fine gold ($\frac{18 \times 113}{240}$; a sovereign contains 113 grains of fine gold, and is equal to 240*d*). The rate of 18*d.* = 1 Re. (= 8.475 grains of gold) is known as our par of exchange with England. It is, however, an artificial par. Government may have fixed the rate of exchange at 16*d.* gold or 2*s.* gold. In fact 16*d.* was the pre-war (1914-18) rate of exchange (Re. = 7.53344 grains of fine gold), and an attempt was made to fix exchange at 2s. gold (= 11.3 grains of fine gold) in 1920.

If the rupee were a tiny gold coin containing 8.475 grains of fine gold, then 18*d.* per rupee would be the Mint Par of the rupee.

Par means "state of equality." Take two countries using the same metal, gold, as their standard of value, for example, England and the United States. If the American gold dollar contains 23.22 grains of fine gold, and a sovereign 113.0012 grains of fine gold, then, one sovereign is equal to 4.866 dollars. This relation is a true Mint Par; it is the rate at which a sovereign is equal to a given number of dollars.

It should be noted that the Mint Par expresses a legal relation; it is determined by the legal definition of a dollar and the legal definition of a sovereign, and it remains unchanged so long as the two legal definitions are not changed. It is quite possible that a sovereign, which has lost some gold on account of wear, may not actually contain as much gold as 4.866 dollars. The Mint Par is not concerned with actual or *de facto* sovereigns and dollars, but with legal or *de jure* coins.

The new American dollar contains 41 per cent less fine gold than the old dollar, so that a sovereign is now equal to 8.24 dollars. If England reduced the fineness of the sovereign in the same proportion, the old Mint Par between England and the United States would be restored.

5. NO FIXED MINT PAR BETWEEN A GOLD STANDARD AND A SILVER STANDARD COUNTRY

There is a fixed Mint Par between two countries when both use gold or silver as the standard of value. But suppose one country is on the gold standard and the other on the silver standard. Can they have a fixed par ?

No. The value of the currency of the one country in terms of the currency of the other country will change with the relation of silver to gold. If silver fell in terms of gold, silver money would ~~become cheaper~~ ; if silver rose relatively to gold, gold would become relatively cheaper.

The rupee had no fixed exchange value in terms of gold before 1893. It was a full value coin, not a token coin, as at present. The result was that when the price of silver fell heavily after 1873 the gold value of the rupee fell with it. Our rate of exchange then fluctuated with the bullion value of silver.

Again, after August 1917, the rise in the price of silver made it profitable to melt down rupees. ~~The price of silver continued to rise till February, 1920.~~ The rise in the price of silver restored the connection between the price of silver and rupee exchange which had been broken in 1893 by the closing of the mints to the free coinage of silver.

6. RISE AND FALL IN THE PRICE OF FOREIGN BILLS

Let us now go back to the par fixed in 1927, 1 rupee = 18*d.* = 8.475 grains of fine gold.

Suppose you have to pay £100 (gold) in England. You want to buy a bill on London of the value £100. The par value of £100 is Rs. 1,333. If you are able to buy the bill for Rs.1,333, well and good. But you may not be able to do so.

In the example given on page 79 we assumed that there was one seller and one buyer of a foreign bill in India, or supply was equal to demand. II wanted a bill for £1,000 and IE had a bill of the same value to sell.

But it is possible for imports, at any particular time, to be of greater value than exports. In that case the demand for bills will be greater than the supply, or there will be a scarcity of bills drawn on London. Exporters draw bills and importers accept them. It follows that when imports into a country are of greater value than exports, foreign bills will be relatively scarce.

When the supply of bills on London is not sufficient to meet the demand, their price will rise.

A bill on London gives the right to receive English money in London. A rise in the price of a London bill, therefore, means a rise in the price of English money, or a rupee will buy, not 18*d.*, but less.

How much less ? What is the most unfavourable rate at which you would be willing to buy a bill of the value of £100 ?

Suppose I possess that bill. I offer it to you at 17*d.* per rupee. Will you buy it ?

You may, if there is no other course open to you. But you can send gold instead of buying my bill.

The cost of transportation of gold per rupee is ¼*d.* It follows that when buying a bill you will not be ready (except in very special circumstances) to sacrifice more than ¼*d.* per rupee.

The most unfavourable rate at which you may be induced to buy a bill on London is 18*d.* (par rate) *minus* ¼*d.*, or 17¾*d.* per rupee. If I offered the bill to you at $17\frac{23}{32}$*d.* you will decline my offer, for if you bought gold and sent it, you will save 1/32*d.* per rupee.

In fact some importers of British goods may send gold when the rate touches 17¾*d.*—it is a matter of indifference whether any one makes a payment to England by sending gold or by buying a bill at that rate ; the cost in both cases is the same. 17¾*d.* per rupee is, therefore, known as the gold export point for India, and also as the lower specie point.

Next suppose that the supply of bills exceeds the demand. Bills on London will become cheaper, or, in other words, more than 18*d.* will be offered per rupee. But how much more ?

Will I offer my bill to you, for example, at 19*d.* per rupee ? I may, under very special circumstances. Ordinarily two courses are open to me. If I am unable to find a purchaser at a satisfactory price, I may have gold sent to me from London at my own cost.

The cost of transportation being ¼*d.* per rupee, I will not ordinarily sell my bill at a rate more unfavourable from my point of view than 18¼*d.* per rupee. The higher the rate at which I sell my bill, the less is the number of rupees I receive for it.

Ordinarily I will not sell my bill cheaper than 18¼*d.* per rupee. If you offered to buy it at 18⅜*d.* per rupee, I would decline your offer and import gold, thereby saving ⅛*d.* per rupee.

When the rate of exchange is 18¼*d.* per rupee, some exporters of Indian goods may actually import gold, for which reason 18¼*d.* per rupee is known as the gold import point or the upper specie point.

To find the upper specie point we add ~~the normal~~ cost of transportation of gold per unit of currency to the par rate ; to find the lower ~~specie point, we deduct the cost of transportation~~ from the par.

7. ARBITRAGE

When the rate of exchange is 18*d.* in India, it must also be 18*d.* in England.

If you find that exchange is quoted at 18*d.* per rupee in London and at 19*d.* in India, lose no time in buying 19 million pence. The cost will be one million rupees. Having got 19 million pence in London, sell them immediately at 18*d.* per rupee, the rate quoted in London. The profit on the transaction will be Rs.55,555.

The buying and selling of currencies with a view to taking advantage of differences in the ~~price of the same currency~~ at different ~~centres is known~~ as *arbitrage.* A difference in the rates of rupee exchange in India and England such as we assumed is impossible. As the result of arbitrage operations such differences are reduced to minimum.

Arbitrage may be three-cornered.

According to the Reserve Bank's *Monthly Statistical Summary*, the average rupee-sterling rate, quoted in Bombay on London (average of working days) in March 1946 was 1*s*. 5$\frac{31}{32}$ *d*. per rupee, the rupee-dollar rate quoted in Bombay on New York was 332¾ Rs. for 100 dollars, and the dollar-sterling rate quoted in New York on London was 4.02⅛ dollars per £ sterling. In round number the equilibrium rates may be taken to be the following :—

Bombay on London	Bombay on New York	New York on London
18*d*.	333 Rs.	4 dollars

Suppose the price of 100 dollars falls to Rs. 300 in Bombay while there is no change in the dollar-sterling rate quoted in New York. Then you can make a profit Rs. 33 by buying 100 dollars in Bombay, converting them into £25 in New York at 4 dollars to the £, and finally coverting £25 into rupees in London at the rate of 18*d*. to the rupee. But since, under the assumed conditions, the demand for dollars in India would increase, their price must rise, and eventually the equilibrium rate of Rs.333 for 100 dollars will be re-established,.

8. GOLD IMPORT AND EXPORT POINTS FOR INDIA ARE GOLD EXPORT AND IMPORT POINTS FOR ENGLAND

The par value of the rupee being 18*d*. and ¼*d*. being the cost of transportation of gold per rupee, an English importer of Indian goods will not ordinarily buy a bill on India at a rate more unfavourable than 18¼*d*. At this rate, he may either buy a bill or send gold. 18¼*d*. per rupee, which is gold import point for India, is gold export point for England.

Similarly a British exporter will not ordinarily sell his right to receive rupees in India, or an Indian bill, at a rate more unfavourable than 17¾*d*. per rupee. At this rate he may either sell his bill or import gold from India at his own cost. 17¾*d*., which is gold export point for India, is gold import point for England.

9. WHEN EXCHANGE PASSES THE SPECIE POINTS

We cannot, speak of "gold points" after the abandonment of the gold standard both by England and India at the end of September, 1931. But the sterling rate is being maintained by the Reserve Bank of India within the limits of the gold points of the rupee. In June 1939 the average rate was 17⅝*d*., which is below the lower specie point (17¾*d*.).

We have said above that you will rather send gold than meet your obligations in England by means of a foreign bill bought at a rate more unfavourable than 17¾*d*. But that assumes that gold is available for export. Suppose there is difficulty in obtaining gold. Actually, in the exchange crisis in India in 1907-08, when demand for means of foreign payments was greater than the supply, and gold for export was not obtainable, exchange fell below the lower specie point. It is said that when the crisis came someone asked for £10,000 of gold from the Accountant-General of Bombay, and the Accountant-General said : "Why do you ask for it?" Sir Edward Baker, Finance Member of the Government of India, was wired to, and he said, "Gold is not for export, it is only for internal purposes." On November 23rd, 1907, exchange fell to 15$\frac{23}{32}$*d*. The par in those days was 16*d*. and the cost of transportation of gold per rupee $\frac{1}{8}$*d*. 15$\frac{23}{32}$*d*. was below the lower specie point of the rupee, 15$\frac{7}{8}$*d*.

A fall of exchange below the lower specie point occurs when (*a*) imports are greater than exports, or the demand for foreign bills is greater than the supply, and (*b*) gold is difficult to obtain for export.

Next suppose that England leaves the gold standard when the United States does not. The Mint Par between the old American dollar and the sovereign, as we know, was £1 (gold) = 4.866 dollars. The cost of transportation of gold between England and the United States was 3 cents per £, so that the upper and lower specie points of the £ were 4.89 and 4.83 dollars. Between 1925 and 21st September, 1931, the dollar-sterling rate fluctuated between these points, but as soon as England left the gold standard, the £ stg. (now paper) fell in terms of the American dollar. In June, 1931, the £ stg. was 100 per cent gold; by December 1931, the £ stg. had lost 30.7 per cent of its gold value.

When does our exchange tend to rise above the upper specie point? Again two conditions must be satisfied : (*a*) the supply of bills on London must be greater than the demand for them, or exports must be greater in value than imports, and (*b*) and there must be difficulty in importing gold.

If I am anxious to turn my foreign bill into rupees, and my need for cash is urgent; if I cannot wait until gold can be sent to me from the foreign centre; and if, finally, many other Indian exporters are in the same position in which I find myself, I will sell my bill for what I can get for it. I may sell it at even 19 or 20*d*. per rupee, when, in other circumstances, I would not sell it at a rate more unfavourable than 18¼*d*. per rupee. Such conditions existed in India during the first world war. During the last three years of the war India had record balances of trade in her favour and these balances, on account of the war, could not be adjusted through the import of gold. The total imports of treasure into India between 1914-15 and 1918-19 amounted to about £36 millions, as compared with imports of treasure amounting to £120 millions between 1909-10 and 1913-14. Other causes were also at work (*e.g.*, rise in the price of silver), and our exchange rose. The rise was controlled by Government, but when Government restrictions, intended to prevent exchange from rising unduly were withdrawn at the end of the war, importers and exporters were free to transact business with one another directly, and exchange rose sharply.

Ordinarily exchange rises and falls within the specie points. If it passes the specie points, something extraordinary has happened.

The rise and fall of exchange within the specie points is due to fluctuations in the supply of and the demand for bills. These changes may have their origin in exports and imports of goods, or in the movements of capital, or in the activities of speculators.

Suppose it has become more profitable to lend money in the London money-market owing to a rise in the rate of interest there. Capital will flow from other countries to England. The flow of capital to England will cause a rise in the price of bills on London in the other countries.

Suppose I have reasons to think that very shortly the rupee rate will fall, let us say, from 18*d.* to 17½*d.* I will convert my rupees into sterling immediately at 18*d.*, and later make a profit by selling sterling at the rate of 17½*d.* to the rupee.

In India Government remittances are a very important factor in influencing the course of exchange. Heavy demand on the part of Government for sterling tends to raise the price of sterling, or to lower the exchange value of the rupee; if Government abstained from buying sterling when private demand for sterling was strong, sterling would not rise much. At a time of exchange weakness, Government help the exchange rate to rise by holding up their demand for foreign remittance.

10. FAVOURABLE AND UNFAVOURABLE RATES OF EXCHANGE

When the rate of exchange is such that gold is likely to be imported, it is said to be favourable; the rate of exchange is unfavourable when it is such that gold tends to flow out.

A fall in rupee exchange below 18*d.* is "unfavourable" in this sense, because, if the lower specie point were touched, we should lose gold. A rise in rupee exchange above 18*d.* is "favourable" as it may lead to gold imports (at 18¼*d.* or above).

When exchange is below 18*d.*, there is a premium on English bills in India, and a discount on Indian bills in London. When exchange is above 18*d.*, bills on London are at a discount in India, and Indian bills are at a premium in London.

When bills on London are at a premium in India, Indian bills must be at a discount in London. Suppose the rate of exchange is 17$\frac{25}{32}$*d.* We have explained above that the rupee is quoted at the same rate in India as in London. In India 17$\frac{25}{32}$*d.* per rupee means a rise in the price of bills on London, or that bills on London command a premium. In London 17$\frac{25}{32}$*d.* per rupee means that Indian bills, payable in rupees, have become cheaper.

A premium or a discount on foreign bills in a country has an important effect on its exports and imports.

Suppose bills on London are selling at a premium in India, that is, the rate of exchange is below 18*d.* per rupee, say, $17\frac{25}{32}$*d.* This means that sterling has become dearer. It will now be more costly to pay for British imports. If the rate of exchange were 18*d.*, anything of the value of 18*d.* in England will sell for one rupee in India (ignoring cost of transportation and export and import duties). At $17\frac{25}{32}$*d.* one will have to pay a little more than a rupee for the same article, the sterling price remaining unchanged.

Because of the rise in the price of sterling, Indian goods will become cheaper to buy for British importers of our goods. At 18*d.* to the rupee they would have to pay 18*d.* for a rupee worth of our oil-seeds or cotton. At $17\frac{25}{32}$*d.*, the same quantity of oil-seeds or cotton will be purchased at a lower price in sterling—there is a saving of $\frac{7}{32}$*d.* per rupee.

11. EFFECT OF PREMIUM AND DISCOUNT ON FOREIGN BILLS.

A premium on foreign bills in India will thus subsidise exports from India and penalise imports into India.

When bills on London are at a premium in our country, Indian bills as we have seen, will be at a discount in London. British imports from India will be subsidised by the discount on Indian bills, and British exports to India penalised.

Next suppose that British bills in India are at a discount, or exchange is quoted at $18\frac{1}{32}$*d.* Imports into India will now be subsidised and exports from India penalised, and since the rate quoted in London will be the same, British imports from India will be penalised on account of the rise in the price of the rupee, and British exports to India subsidised.

We have seen that when exchange falls below 18*d.*, it is said to become unfavourable as it may lead to gold exports. But the fall in exchange by itself will tend to check imports and to encourage exports. An unfavourable rate of exchange thus tends to correct itself.

Similarly a favourable rate of exchange (above 18*d.*) sets forces in motion which tend to make it less favourable. It encourages imports and discourages exports.

When the balance of trade is favourable or unfavourable, the rate of exchange is also favourable or unfavourable respectively. It should be clear to the reader that a purely conventional meaning attaches to the terms "favourable" or "unfavourable" rate of exchange. There is one buyer of exchange for one seller. The rate which is favourable from the buyer's point of view is unfavourable from the seller's point of view. Again, a rate below 18*d.* would be considered favourable by Indian manufacturers and peasants. For manufacturers it reduces the intensity of foreign competition by raising the price of British goods; for peasants it means greater value in rupees for the same quantity of goods sold abroad, the foreign price remaining unchanged. Still a rate below 18*d.* will be called "unfavourable" because it may lead to gold exports.

How the peasant is benefited by a fall in the rate of exchange may be explained by a numerical illustration.

When the rate of exchange is 18*d.* per rupee and a given quantity of Indian cotton is sold for £1,000 in London, the peasant receives Rs.13,333 as the price. Assume that the same quantity of cotton is sold in London at the same price as before, but that the rate of exchange is $17\frac{25}{32}$*d.* £1,000 at $17\frac{25}{32}$*d.* per rupee is equal to Rs.13,497, which means a gain of Rs.164 for the peasant.

The Indian manufacturer of cotton goods will be encouraged because British cotton goods of the value of £ 1,000 will cost Rs.13,497 instead of Rs.13,333, exchange having fallen from 18*d.* to $17\frac{25}{32}$*d.*

12. MEASURES TAKEN TO STOP A FOREIGN DRAIN OF GOLD

A country without gold mines possesses a given amount of gold. Its stock of gold is increased by imports, and reduced by exports.

Gold in a country is of two kinds, monetary and non-monetary. We own a large amount of non-monetary gold in the form of hoards and ornaments. It is the quantity of non-monetary gold in India that has suffered reduction on account of gold exports since 1931.

In European countries, such as England, monetary gold is of far greater importance than non-monetary gold. Monetary gold is gold used as the basis of credit.

Suppose the United States holds a large amount of maturing bills drawn on England. These bills can be turned into cash by getting them discounted in England. Whether it is profitable or not to get the bills discounted depends on the London rate of discount. Bills used in foreign trade are generally three months' bills. If the rate of discount is 4 per cent per annum, the present value of a three months' bill of the face value of £100 is £99. If the rate of discount were 8 per cent £98 would be given for the bill, other things being equal.

13. IMMEDIATE AND ULTIMATE EFFECTS OF RAISING THE BANK RATE

Suppose the Bank of England raises its rate of discount from 4 per cent to 8 per cent and its lead is followed by the joint-stock banks. Those who hold maturing bills on England will be induced not to turn the bills into cash on account of the high rate of discount.

A rise in the rate of discount would make it more profitable to lend money in London than in the other centres where the rate of discount was lower. A rise in the rate of discount in London would, thus, not only check a foreign drain but attract gold to London.

This is the immediate effect of a rise in the Bank rate (the rate of discount of the Central Bank). The ultimate effect is not less important.

A high rate of discount raises the cost of borrowing and would therefore restrict the creation of new credit. If trade and industry are expanding normally, while the supply of credit money is thus limited, a scarcity of media of payments will begin to be felt and commodity prices will tend to fall. A fall of prices makes a country a good market to buy in and a bad market to sell in. If the restriction of credit is sufficient to make British prices fall, England's exports will increase and her imports decrease, or the balance of trade will turn in England's favour. When exports are greater in value than imports, the supply of foreign bills will be greater than the demand, and the price of foreign bills will fall, or, in other words, foreign currencies will become cheaper in terms of English money. With a favourable balance of trade the rate of exchange will also become favourable.

We have seen that gold tends to flow out when the balance of trade and the rate of exchange are unfavourable. The rise in the Bank rate sets forces in motion which, by lowering commodity prices, encourage exports, discourage imports and turn the balance of trade in the country's favour. The causes of the drain of gold are thus removed.

14. THE LONG RATE

We have said above that the price of a three months' bill of the face value of £100 will be 99 if the rate of discount is 4 per cent per annum. Certain other factors have also to be allowed for.

If a bill has been drawn in India on London, what you will pay for it in India depends, in the first place, on the rate of discount not in India but in London. Why ?

Suppose you are buying the bill to pay your book-seller in London. If you send him a bill which will mature in three months, he will not credit you with the face value of the bill, but with the amount that a bank will pay for it. The price at which a bank will buy the bill depends on the bank's rate of discount.

Secondly, the stamp duty on the bill has to be paid.

Thirdly, the value of a bill also depends on the credit of the person on whom it is drawn, and allowance has to be made for risk, which increases with time. In the case of sight bills this risk is negligible. The longer the period of maturity of a bill the greater the risk.

A bank which buys a three months' bill has to wait for three months for payment, and anything may happen to the drawee in these three months—he may disappear without leaving a trace. The bank will, therefore, allow for the element of risk in the price that it will offer for the bill.

It follows that the T. T. rate of rupee exchange (telegraphic transfers) will be lower than the rate for three months' bills, and the rate for three months' bills will be lower than that for six months' bills.

Sometime ago the T. T. rate was quoted in Calcutta at 1*s.* $5\frac{15}{16}$ *d.*, and sixty days' sight rate at 1*s.* 6¼*d.* The latter means the rate at which banks were selling two months' bills on London. The rate for telegraphic transfers was lower than the rate for two months' bills. A lower rupee rate, as the reader has already learnt, means fewer pence per rupee, or a higher cost of sterling. Sterling, in other words, was cheaper to buy when delivery was to be made in two months (1*s.* 6¼*d.* per rupee) than when it was to be delivered immediately(1*s.* $5\frac{15}{16}$ *d.* per rupee).

DEPRECIATION AND DEVALUATION

The present United States' dollar is not the same as the old dollar ; nor is the present British pound the same as the old pound. The pound has depreciated in terms of gold ; the American dollar has been *devalued*.

A currency is devalued when its relation to gold is changed by law. By law the fine gold contents of the American dollar were reduced by 41 per cent in 1934.

There has been no devaluation yet of the sovereign, and that is why the Mint Par between the sovereign and the American dollar at present is £1= 8.24. dollars. Since the £ stg. buys only 4.02½ American dollars, it has depreciated in terms of gold.

The £ (gold) is certain to be devalued when normal conditions return.

Similarly, we can at present talk only of the depreciation of the rupee in terms of gold, not its devaluation. The rupee will be devalued when its gold value is fixed at a lower figure than 8.475 grains (18 *d.* gold).

16. SELF-REVERSING TRANSACTIONS

We have seen that a demand for foreign currencies may have its origin in trade transactions, or movements of capital, or in speculative transactions. When we raise a loan abroad, exchange will tend to turn in our favour, for the loan will be paid to us through the conversion of pounds into rupees. We may use these pounds to repay an old debt, and thus assist the exchange value of the rupee to rise, if it was tending to fall. If the new loan is not used for this purpose, when interest payments begin, and when the principal is repaid, a reverse movement of capital from India to England will take place. When the loan is made by England, demand for rupees in exchange for pounds will increase in London. When the loan is repaid by India and when interest on the loan is paid, the demand for pounds in exchange for rupees will increase in India. The flow of capital thus eventually reverses itself.

Similarly when we buy sterling for speculative purposes, the transaction is self-reversing, for a profit will be made only when the sterling purchased is re-coverted into rupees.

Currency transactions having their origin in exports and imports of goods are not self-reversing. But exports are the price that a country pays for imports, and normally a reduction of imports will be accompanied by a reduced demand for a country's exports. Only surplus exports or imports create a one-sided demand for foreign currencies.

17. EFFECT OF TARIFFS

Suppose there is a strong demand for our exports, while our own demand for imported goods is highly elastic. In these circumstances, a high tariff will reduce imports by raising the prices of the imported goods concerned, without a perceptible effect on exports. The exchange value of the rupee will rise. There will be more sellers of foreign bills than buyers, the prices of foreign bills will fall, and more than 18*d.* will be obtainable for a rupee.

18. EXCHANGE AND PRICES. THE THEORY OF PURCHASING POWER PARITY

When two countries are on the gold standard, the Mint Par between them is fixed. Suppose both countries leave the gold standard and their paper currencies depreciate in terms of gold. How will the rate of exchange between them be determined ?

Let us take two countries *A* and *B*. In both countries paper money is convertible into gold. What will be the price of *A*'s paper money in *B* ?

Why should one country want the paper money of the other country ? *A*'s paper money cannot circulate in *B*, nor *B*'s paper money in *A*, but paper money of each country possesses purchasing power in terms of goods of the same country. With *A*'s paper money *B* may buy *A*'s goods, and with *B*'s paper money *A* may buy *B*'s goods.

It is evident that the ratio of exchange between *A*'s and *B*'s paper money will depend on the relation between the purchasing power of paper money in the two countries.

For example, suppose that after leaving the gold standard the purchasing power of money falls to ¼ in *A* and to ½ in *B*. This means that while prices in *B* double, they quadruple in country *A*. In terms of purchasing power the paper money of *B* is now twice as valuable as that of country *A*. If, before the change, a unit of *B*'s money exchanged for 20 units of *A*'s money, now it will be worth 40 units.

This is the famous theory of purchasing power parity which was universally discussed in the years following the Great War. Paper money of most countries had depreciated and prices had risen. The purchasing power parity theory furnished an explanation of the rate of exchange when Mint Pars had disappeared. When there is inflation in two countries, the rate of exchange is determined by the degree of inflation in the one country as compared with the degree of inflation in the other. If prices in England double, while prices in India rise by 50 per cent, the purchasing power of money in England is $\frac{1}{2}$, and in India $\frac{100}{150}$, or $\frac{2}{3}$ of what it was before. Therefore one unit of Indian money, in terms of purchasing power, is equal to $\frac{2}{3} \times \frac{2}{1} = \frac{4}{3}$ units of English money. If, before the change, a rupee was equal to 18*d.*, now it will exchange for $\frac{18 \times 4}{3} = 24d.$ or 2*s*. That will be so because the purchasing power of 2*s*. in England after the doubling of prices in that country, is equal to the purchasing power of a rupee in India, after the rise in Indian prices from 100 150.

Suppose the rate of exchange does not rise to 2*s*.—it remains 18*d*. as before. This means that British money is over-valued, or its external purchasing power is greater than its internal purchasing power. The over-valuation of British money will subsidise imports into England and penalise exports from England. When imports into England exceed exports, the demand for rupees, or Indian currency, will be greater than the supply. The price of Indian bills in London, or of rupees, will rise, and when equilibrium is reached, 2*s*. will be given for a rupee.

If, on the other hand, the rate of exchange is 3*s*. per rupee, British money is under-valued, and the rupee is over-valued. Imports into India will increase, and our exports decrease. Demand for London bills in India will be greater than the supply, and the price of sterling (British paper money) will go up—or our rate of exchange will fall. Equilibrium will be restored when the rate of exchange has fallen to 2*s*.

The purchasing power parity theory was formulated at a time when European currencies were ~~rapidly depreciating~~, which caused ~~violent fluctuations~~ in the exchanges. These latter were attributed to reparation and other war-debt payments and the activities of international speculators. But the most important cause was unbalanced budgets of European governments, and the covering of budget-deficits by the creation of more and more new money. The theory of purchasing power parity brought into prominence one of the most important causes of exchange depreciation—inflation. The remedy thus lay in increased taxation and balancing the budget.

While changes in relative prices must affect exchange through their influence on exports and imports, there are, as we have seen, other causes, unconnected with price movements, which may raise or depress the exchange value of a country's currency. Government remittances, the movement of banker's funds, speculative buying and selling of foreign currencies affect the rate of exchange. Tariffs may, under certain conditions, raise the exchange value of a currency. A more interesting case is that of exchange depreciation in one country directly inducing a fall of prices in other countries—in such a case the exchange movement is the cause, and the price-movement or movements the effect. For example, when Britain left the gold standard, the value of the £ sterling in terms of gold fell heavily. But British prices did not rise—they remained fairly stable. The fall in the exchange value of the £ sterling increased Britain's power of competition in the world markets. To meet British competition producers in foreign countries were forced to lower their costs and prices. Exchange depreciation in England thus lowered prices elsewhere, and British prices rose only in a relative sense. It is evident that, in certain circumstances, exchange becomes a causative factor in relation to the price level. The purchasing power parity theory, on the other hand, assigns a wholly passive role to the exchange rate.

This theory breaks down if the movements of goods between countries is not free. Further, it takes account of the internal purchasing power of currencies in terms of only such goods and services as enter into international trade. But the internal purchasing power of money must include many classes of local goods and services. The method of calculating the index of purchasing power is also far from satisfactory. The wholesale price-index (*a*) ignores the prices which consumers actually pay (*b*) and important services, such as transportation, amusements and entertainments, and many other services rendered directly to the consumer.

It has been suggested that since wages enter into the prices of all goods, the best index of purchasing power will be a wages-index. But in such countries as India, where the bulk of producers are independent workers, not employees, a wages-index will have very limited utility.

19. RECENT TENDENCIES

In explaining the rise and fall of exchange we have throughout kept the market in foreign bills in view. This is because foreign bills still play an important part in financing our trade.

In the leading countries, however, the foreign bill market is tending to be replaced by the foreign currency market. Bills are not used in financial dealings, and their use in financing even the exports and imports of goods is rapidly declining. Foreign currencies are directly bought and sold by and through banks, and dealings in foreign exchange have come to mean the exchange of bank deposits in one country for bank deposits in another country. Very often this exchange takes place by means of cheques. The largest dealers in foreign exchange are banks, and a bank would take care to be well supplied with stocks of foreign currencies for which there was a keen demand. But while a dealer in cotton usually keeps a stock of cotton in his godowns, a bank does not fill its cellars with actual dollars or francs. It is sufficient if the bank has a right to dollars or francs in other countries.

There are three differences between a bill and a cheque. (1) A bill is drawn on any debtor, while a cheque is drawn on a bank; (2) a bill is payable on maturity while a cheque is payable at sight; and (3) a bill is valid only when it is drawn and accepted. One does not speak of 'acceptance' in connection with cheques; the bankers concerned must pay them, unless anything is out of order.

20. FORWARD AND SPOT EXCHANGE

There are spot and forward transactions in foreign currencies as in wheat or cotton.

Suppose I have placed an order for machinery worth £100,000 in England, the payment to be made when machinery is delivered to me in India. At the time of placing the order the rate of exchange is 18*d.* per rupee (13⅓ Rs. per £ sterling), and the estimated cost of machinery is thus Rs.13⅓ lakhs. But, suppose, exchange unexpectedly falls to 16*d.* when the goods arrive at the end of a year. I would be called upon to pay 15 lakhs, at 16*d.* per rupee, which would inflict on me an entirely undeserved loss of Rs. 1⅔ lakhs. This actually happened in India in 1920 when exchange fell from about 3 shillings in February to about 1*s.* 4*d.* at the end of December of the same year. Many importers were ruined.

The risk arising from a fall in the rate of exchange may be avoided by buying forward exchange. The risk will then be shouldered by the party selling forward exchange.

When an Indian bank has sold sterling forward to *A*, it may buy sterling forward from *B* in such a case the two transactions are said to be " married."

Ordinarily spot and forward rates are not identical, but the difference between them tends to be confined within narrow limits. Suppose the forward demand for sterling, in any particular case, exceeds the spot demand. Then the bankers will buy sterling in the spot market and keep it in London on deposit until the date of delivery. A loss of interest may be involved, which would be covered by charging a premium on sterling. The difference between the rates of interest in two countries determines the extent to which the price of forward exchange exceeds that of spot exchange. But forward rates are also much influenced by the activities of speculators, and when conditions in the exchange market are unstable, forward rates will diverge sharply from the spot rate. Assume that there is a strong feeling in business circles that the rate of exchange is too high and will probably be lowered by Government decision, or by the operation of economic forces. If the spot rate is 18*d.*, the forward rate may be ¼, ½, or 1*d.* lower.

CHAPTER VIII

MONETARY STANDARDS : INDIAN CURRENCY EXPERIENCE, 1873-1925

A study of monetary standards is essential for two reasons. The monetary standard determines the currency which passes from hand to hand in business transactions within the country. This currency may be largely silver, or gold or paper. Silver coins may be of full value or token coins. Gold may circulate in the form of coins, paper playing a subordinate role, or gold may be concentrated in the reserves, Government undertaking to convert paper money and token silver coins into gold for meeting foreign indebtedness. Thus a monetary standard has a national as well as an international aspect. It provides media of payments within the country, and since foreign indebtedness, arising from any cause, has to be met, the discussion of monetary standards necessarily involves a discussion of the rate of foreign exchanges.

We may begin with facts with which we are more familiar—Indian currency experience. This currency experience is valuable as showing the importance attached in the past to (1) a metallic circulation and (2) a stable rate of exchange. Till the closing of the mints to the free coinage of silver in India in 1893, the circulation chiefly consisted of silver coins of full value. When the silver standard ceased to function, it was proposed to introduce a gold circulation. Gold went out of circulation universally with the outbreak of the first world war, and when the gold standard was restored, the new gold standard was divorced from the currency—that is to say, the standard was not embodied in a gold coin. The separation of the standard from the currency is now complete. A gold reserve is maintained for safe-guarding the external value of the currency, but a minimum percentage of gold to the total note-issue is not insisted upon—the "Golden Calf" may be slimmed to the vanishing point !

Secondly, as we shall presently see, excessive importance is not attached now to a stable rate of exchange. Under certain conditions a freely fluctuating rate of foreign exchange may be more advantageous, particularly to an agricultural country. Stability of incomes is the primary consideration.

1. DEMAND FOR A GOLD CURRENCY, 1864

The silver rupee of 180 Troy grains, $\frac{11}{12}$ fine, was established as the standard coin and principal measure of value throughout the territories governed by the East India Company in 1835. A certain amount of gold was in circulation in the form of coins, but gold coins were not legal tender.

The demand for a gold circulation increased after gold became more abundant as a result of gold discoveries in Australia and

California, and the Bombay Association submitted a memorial to the Viceroy and Governor-General of India praying for the introduction of a gold currency which may still be read with interest.[1]

A few months later, the Finance Member, Sir C. E. Trevelyan, prepared a Minute on a gold currency for India, in which he ably supported the demand of the people of India for a gold currency. The people of India, he said, " have never acquiesced in the exclusion of gold from the currency, nor have they accepted paper as a substitute for it. The plan of locking up reserves of the precious metals in strong rooms and representing them by convertible paper, belongs to an advanced stage of civilization. The great majority of the people of India must have intrinsic value in their hands before they are convinced that payment has been made to them." The evidence produced by Sir C. E. Trevelyan to show that the people were determined to have a gold currency is reproduced below :[2]

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[1] *The respectful Memorial of the Bombay Association, to the Right Honourable Sir John Lawrence, Bart., G.C.B., K.S.I., etc., etc., etc., Viceroy and Governor-General of India in Council, dated 8th February, 1864.*

Sheweth,

1. That your Memorialists beg respectfully to submit for the serious and favourable consideration of Your Excellency in Council, the following representation in regard to the question of the introduction of a gold currency into India.

2. That the existing silver currency is no longer adequate for the wants of India, and that commerce begins to be seriously crippled by its inefficiency.

3. That from time immemorial until some years ago India possessed an extensive gold currency.

4. That the superior convenience of this circulating medium was well understood by the natives of this country.

5. That the measures adopted by the British Government for the regulation of the money of India had the effect of gradually suppressing a gold and extending a silver currency, and that finally in 1835 an Act was passed declaring gold no longer a legal tender.

6. That these stringent regulations have virtually extinguished a gold currency in India, but have by no means extinguished its popularity.

7. That the few gold coins remaining in circulation are greatly prized and command a considerable premium in the market.

8. That rude attempts are made by some of the natives of India to remedy the defects of the present inconvenient silver currency by circulating gold bars authenticated by the stamp of Bombay banks.

9. That when the present currency was introduced into India silver was much more abundant than gold, and on this account was probably adopted.

10. That large quantities of gold have now been discovered in adjacent countries, and that this metal being now greatly more abundant than silver, the same reason which originally led to the introduction of silver now should suggest the expediency of the introduction of gold.

17. That a silver currency convenient for the people of India a quarter of a century ago, when trade was limited, and payments in the main extremely small, is very inconvenient now that wealth is largely diffused throughout the country and the operations of commerce have become so enormous.

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18. That the transport of this bulky and cumbersome currency entails constant and useless expense upon the country, and its consequent sluggish circulation is a serious impediment to trade.

The Secretary of State, however, did not think it advisable to make the sovereign legal tender but, as an experimental measure, he suggested that the sovereign and the half-sovereign should be received into and paid out of public treasures in India, and effect was given to this proposal. A few years later the gold value of silver began to fall and the Government of India adopted the following Resolution on the subject of a gold currency on 7th May, 1874 :—

"The expediency of introducing a gold currency having been considered, the Governor-General in Council is not at present prepared to take any step for the recognition of gold as a legal standard of value in India."

2. THE FALL IN THE RATE OF EXCHANGE

We are here not concerned with the causes of the fall in the gold value of silver, but its effect on the sterling rate of the rupee. The following statement shows the exchange rate of the rupee from 1872-73 to 1898-99.

The average rate per rupee at which Council Bills and Telegraphic Transfers were sold in London :—

1872-73	22·754	1885-86	18·254
1873-74.	22·351	1886-87	17·441
1874-75	22·156	1887-88	16·898
1875-76	21·626	1888-89	16 379
1876-77	20·508	1889-90	16·566
1877-78	20·791	1890-91	18·089
1778-79	19·794	1891-92	16·733
1779-80	19·961	1892-93	14·985
1880-81	19·956	1893-94	14·547
1881-82	19·895	1894-95	13·101
1882-83	19·525	1895-96	13 638
1883-84	19·536	1896-97	14·451
1884-85	19·308	1897-98	15·354
		1898-99	15·978

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[2] "Although gold is not available as a legal tender in payment of debts and taxes in the British dominions in India, the people in some parts of India have endeavoured to remedy the defects of the present inconvenient silver currency by circulating gold bars authenticated by the stamp of Bombay banks. This rude attempt to organise an ignot currency in the face of every discouragement, proves the determination of the people to have gold, and shows that the Government would be cordially seconded by them in any attempt to introduce a gold currency on a sound footing.

A still more striking instance is that gold coin is in such request, that real gold *mohurs* nearly of standard value, are habitually made by forgers, chiefly to secure the premium on which they sell . . . .

Many other proofs might be adduced of the popularity of gold coinage in India. The Native State of Jeypore has long enjoyed a reputation for the purity of its coins ; and Jeypore gold *mohurs*, which were formerly seldom seen, have of late years obtained an extensive circulation. In the Punjab. the use of gold, as a medium of exchange, has greatly increased of late years. In the Sikh time it was chiefly procured from Russia through Kabul ; but, to use Mr. Melvill's words "the facilities of communication with Culcutta and Bombay, which are freely supplied from Europe and Australia, have given the precedence to those markets

A heavy fall in the rate of exchange occurred between 1872-73 and 1892-93. What were its effects on the finances of the country and foreign trade ?

Home Charges.—The " Home Charges," which have largely disappeared on account of the repatriation of sterling debt during the second world war, amounted in 1892-93 to £16,532,000—an obligation which had to be met in gold, while the revenues of the Government were collected in silver. The Home charges consisted of interest on sterling debt incurred for India in England ; charges for civil and military administration, interest and annuities on account of State railways and guaranteed lines and on ordinary debt ; furlough allowances, pensions, payments to the Government in England for British troops employed in India, stores of every kind, railway material for use in India, and the Secretary of State's administration at the India Office. The fall in the sterling rate of the rupee meant a heavy addition to the Home Charges. The cost of the Home Charges in rupees in 1892-93 was 264,780,000 rupees. If this remittance (£16,532,000) could have been made at the rate of exchange prevailing in 1873-74, the payment would have been 177,20,000 rupees. The fall in the gold value of silver involved an additional payment by India of more than 87,000,000 rupees from the revenues of the year. Apart from the increase in the burden of the Home Charges, the situation was uncertain from year to year, as the fluctuations of exchange were unpredictable.

" The financial position," Sir David Barbour wrote in March 1893, " is at the mercy of exchange, and of those who have it in their power to affect in any way the price of silver. If we budget for the present deficit of 15,950,000 rupees, and exchange rises one penny, we shall have a surplus ; if it falls a penny, we shall have a deficit of more than 30,000,000 rupees ; if we impose taxation to the extent of 15,000,000 rupees, a turn of the wheel may require us to impose further taxation of not less magnitude ; another turn and we may find that no taxation at all was required. What we have got to consider in making our arrangements for next year is not so much the question of increasing the public revenue, or restricting that portion of the public expenditure which is under our control, but the chances of a settlement of the currency question."[3]

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in the supply of gold.' Mr. McLeod reports that the sovereign is now the gold coin most familiar to the people of the Punjab ' being by far the most abundant and almost the only one now employed systematically for equalising the exchange . . . . . ' "

[3] Sir John Strachey, Finance Member of the Government of India before Sir David Barbour, thus referred the difficulties created by the falling rupee *India, its Administration and Progress*, p. 198-99) :—

" No one can say where this continuous depreciation of silver is to stop, or when we shall see the end of the constantly recurring increase in the liabilities of the Government which follows as the inevitable result. Recourse has already been had to taxes that are economically objectionable, and which place fresh burdens upon the poorer classes, and we are perilously near the time in which we may be called on to adopt measures which may be politically dangerous or

A difficult situation is created for debtor countries when the value of national currency falls. A debtor country may be a sovereign State, having no political "Home Charges" to pay, but the interest on foreign loans must be paid, and eventually the principal must be repaid. Unless the loss arising from the debt services is more than recouped from the gain resulting from other sources, a debtor country must, on balance, stand to lose by a fall in the value of the national currency. Many debtor countries, including India, found themselves in this dilemma when agricultural prices fell heavily in 1929-33.

Similarly in 1873-96 gold prices of commodities had fallen substantially.

Check to Investments in India.—The Report of the Herschell Currency Committee thus refers to the adverse effects of the fall in the rate of exchange on the investment of foreign capital in India :—

> "London is ready enough to lend upon contracts for repayment in gold, but hesitates to enter upon silver transactions, or to engage in industrial enterprise in a silver country. There can be no doubt that uncertainty as to the interest which would be received for the investment, and as to the diminution which the invested capital might suffer if it were desired to re-transfer it to that country [United Kingdom], tends to check British investments in India." (Para 28).

Interest or profit amounting to 10 rupees would be equal to £1 at the rate of 2*s*. to the rupee, but the same amount in rupees would be equal to 13⅓*s*. at the rate of 16*d*. to the rupee. Capital amounting to £1,000,000 = Rs.10,000,000 at 2*s*. per rupee, would be reduced, when re-transferred to the United Kingdom at the rate of 16*d*., to £666,667—a loss of one-third in capital value. Certain Indian industries, notably jute and tea, had attracted considerable British capital. There was also another difficulty. European employees were required for carrying on European industrial undertakings in India. The fall in exchange reduced the gold value of their salaries, savings and pensions. They were not so eager to enlist for service in India as before and demanded exchange compensation. A falling exchange would thus tend to raise the cost of such undertakings, and cut into profits.

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inexpedient. We have hitherto never introduced into India any strange and unpopular taxation affecting the masses of the population. If we are to change this policy, and were to impose heavy burdens of a kind hitherto unknown, our position might become very different from what it has been in the past. Our difficulties would be seriously increased if such burdens were to meet charges from which the Indian taxpayer derived no benefit, the nature of which he was unable to understand, and which were the direct result of the existence of a foreign dominion. No language that I could use would be too strong to express my sense of the gravity of this question. There is no Indian authority who does not feel that, if it be allowed to drift on in the future as it has drifted in the past, we may some day find ourselves in a position not only of extreme financial difficulty but of political peril."

Servants of the Government.—The position of European Government servants was similar. They were under the necessity of remitting part of their salaries to the United Kingdom for the support of their families, and were hit hard by the falling exchange. On account of the fall in gold prices of commodities, a smaller remittance purchased more than formerly. "This is no doubt to some extent true, but it does not apply to all prices," said the Herschell Committee* (Para 17).

Effect on Commerce.—A fluctuating rate of exchange is a cause of harassment to trade, but as was noted by the Herschell Committee, "provision can be largely made against the effect of those fluctuations through the medium of banks" (Para 25). But the security thus obtained by the debtor is not complete, and a price has to be paid for it. It cannot be shown that a stable rate of exchange is not preferable to a rate constantly varying in an unpredictable manner, which makes foreign trade a gamble. But while trade is seriously harassed by the uncertainties of exchange, its volume is not seriously diminished from this cause over a series of years.

Were exports stimulated by the falling exchange? The evidence was carefully analysed by the Herschell Committee, and their verdict was unfavourable. From 1871-72 to 1876-77 the gold ratio of the rupee fell constantly from 23.12*d.* to 20.508*d.* or about 11¼ per cent but the quantity of exports actually decreased during this period. From 1878-79 to 1884-85 exchange was fairly steady, the average rates varying only between 19.961*d.* and 19.308*d.* per rupee, or about 3¼ per cent; during these six years exports rose by no less than 36½ per cent. Again between 1884-85 and 1888-89 the fall of the rupee was very rapid, from 19.308*d.* to 16.379*d.* or over 15 per cent, and the exports increased during those four years by 16½ per cent. It would appear as if exports were stimulated by the fall in exchange. But in the single year 1889-90, when there was a slight improvement in the exchange, exports increased by more than 6½ per cent. It is evident that the volume of exports is not simply determined by the rate of exchange. Other factors, such as the seasons, the state of foreign demand, and above all, prices abroad, must be taken into account. By itself a falling exchange will give a stimulus to exports, but a fall of prices abroad might wholly neutralise it.

Did the falling exchange check imports? From 1871-72 to 1876-77, when exchange fell by 17¼ per cent, imports of merchandise into India increased by 17 per cent; from 1878-79 to 1884-85, when exchange was steady, the increase of imports exceeded 47 per cent; between 1884-85 and 1888-89, when the rupee fell about 15 per cent, the imports grew by about 25 per cent, while in 1889-90, when exchange slightly rose, the imports were rather less than in the previous year.

Again, by itself, a fall in exchange would tend to check imports by increasing their cost. At 2*s.* per rupee a given amount of British cloth valued at £100 would cost Rs.1,000 in India (ignoring cost of transportation and export and import duties), and at 16*d.*, Rs.1,500.

But if the gold price of the given quantity of cloth fell from £100 to £60, the Indian price would be Rs.900, or Rs.100 less than before. Imports will increase in spite of the fall in exchange. The Herschell Committee concluded: "Upon the whole we cannot see any evidence that the effect of a falling exchange on the country at large in influencing either exports or imports has over a series of years been very considerable." They also thought that even if a fall in the gold value of the rupee did stimulate exports, the result was not necessarily to the benefit of India as a whole. Some classes of the population gained at the cost of others—wages rise more slowly than prices, and thus the employers might be expected to benefit temporarily. When wages rose sufficiently their gain would disappear.

There is one point which has been ignored in this discussion. Suppose exchange had not fallen, or measures had been devised to keep it unalterably fixed at 2*s*. throughout the period of falling gold prices—1873-96. What would have been the effects of a stable rate of exchange on our export trade? There is no doubt at all that exports would have seriously contracted, inflicting heavy losses on the Indian grower. Why? If world prices fall, and cost of production and prices in India do not fall sufficiently, our power of international competition must be seriously affected. We may, in such circumstances, lose important export markets for ever. Exports for which the foreign demand is less elastic, or in regard to which we have a monopoly, may not suffer much. But demands are often inter-dependent; we may enjoy a monopoly of jute, but a contraction of trade would still reduce the demand for jute bags. And there are substitutes for everything.

Assume that there is no contraction of demand; even then the Indian cultivator is a loser in so far as the gold price of his exports is lower than before. A fall in the rate of exchange partially compensates him for the loss.

This may be made clearer by an example. A given quantity of wheat is sold abroad for £100. At the rate of 2*s*. per rupee, ignoring cost of transportation and other charges, the cultivator receives Rs.1,000 as the price. If the gold price fell by 40 per cent the rate of exchange remaining unchanged, the price received by the cultivator for the same quantity of wheat exported would be reduced to Rs.600. In Indian agriculture wages are of little account—hired labour is employed in our agriculture to a negligible extent. Interest charges are an important element in cost, but there is no single rate of interest at which the cultivator borrows, and it cannot be shown that the *mahajan* automatically reduces his charges as prices fall. The effect of a fall of prices is thus to reduce the remuneration for the cultivator's labour. That is how adjustment takes place in Indian agriculture to a fall of prices abroad, or a reduction in the quantity exported.

Suppose that when prices fell by 40 per cent exchange also fell by an equal percentage, or from 2*s*. to 14.4*d*. £60 at 14.4*d*. to the rupee is equal to Rs.1,000. The fall in exchange would give the cultivator as many rupees as before, or it would neutralise completely the effect of the fall in gold prices. A fall in exchange whose extent was smaller than that of the fall in gold prices, would still be of use in reducing the loss of the cultivator.

Complications are introduced by foreign indebtedness. But, as the example given above would show, a fall in the rate of exchange is an important means of minimising losses arising from causes beyond the control of the grower in agricultural countries.

3. THE GOLD EXCHANGE STANDARD

The gold value of the rupee was fixed at the equivalent of 16*d.* in 1893 and free coinage of silver ceased in that year. After continuing to fall for some time exchange began to rise and in 1898 it practically touched 16*d.* The Fowler Committee reported in that year. The main recommendations of that Committee were that the sovereign should be declared unlimited legal tender throughout India at 15 rupees per sovereign, and that a gold standard with " its normal accompaniment " a gold currency should be established in India. The Committee also recommended that " fresh rupees should not be coined until the proportion of gold in the currency is found to exceed the requirements of the public, and that any profit on the coinage of rupees should be kept in gold as a special reserve entirely apart from the Paper Currency Reserve and the ordinary Treasury balances." The reserve was to be used for maintaining the exchange value of the rupee.

An interesting scheme for the introduction of a gold standard in India without a gold currency was submitted to the Committee by a Calcutta banker, Mr. A. M. Lindsay. The scheme was rejected both by the Government of India and the Fowler Committee.

As early as 1876, only a few years after the commencement of the fall in the gold value of silver, it had been suggested by Major-General Sir Richard Strachey that the mints should be closed to the free coinage of silver, that the gold value of the rupee should be fixed artificially and that rupee notes should be issued against gold at the rate fixed. The authorities in India did not appreciate the novel idea of establishing a gold standard with a currency mainly composed of token silver currency. Major-General Sir Richard Strachey's proposal called forth a spirited reply from R. B. Chapman,[4] a high financial officer of the Government of India, and in a despatch to the Secretary of State the Government of India expressed their views on the proposal in no uncertain terms.[5]

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[4] " I am astounded that you should propose such a tremendous heresay as a permanent divorce between the standard and the currency. Surely this is nothing in the world but an inconvertible currency, limited, it is true (though I observe that you would not even limit it absolutely), but still inconvertible. If we are to go in for an inconvertible currency, why should we go to the useless expense of having it in silver ; surely it would be only commonsense to go to paper at once ? I have seen plainly that we must go through a period of inconvertible currency of silver with a gold standard ; but I have always looked upon this as an evil of the first magnitude from which we should use every exertion to escape at the very

4. THE LINDSAY SCHEME

Mr. Lindsay's scheme is fully explained in a currency pamphlet entitled "Ricordo's Exchange Remedy" by "A. M. L." (1892.)

Ricardo said in the famous Bullion Report :

"A currency is in its most perfect state when it consists wholly of paper money, but of paper money of an equal value with the gold which it professes to represent. The use of paper instead of gold substitutes the cheapest in place of the most expensive medium and enables the country to exchange all the gold, which it before used for this purpose, for raw materials, utensils, and food, by the use of which both its wealth and enjoyments are increased."

Ricardo suggested that British Money should be based, not on gold coins, but on stamped gold bars, weighing 20 oz. each. He argued that if the quantity of money in circulation were in excess and money tended to fall below its gold value, it would be exchanged for gold bars for exportation ; if it were deficient, gold bars would be taken to the mint and currency demanded. Within the country, paper, silver and copper media would meet all legitimate monetary requirements while for the payment of foreign indebtedness stamped gold bars would be more suitable.

"Ricardo's Exchange Remedy" is only another name for the gold bullion standard. Ricardo's proposal was not acceptable to the authorities in England. Sir Robert Peel preferred Lord Overstone's standard coin scheme to Ricardo's standard bar plan, as he was convinced that "The most effectual means for promoting confidence in the paper circulation of the country is to require that the gold coin shall be in general use for small payments." "These objections" wrote, Mr. Lindsay, "have little weight now-a-days" :—

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earliest opportunity. It startles and staggers me that you should say that such a man as yourself, to say nothing of the rest of the powers that be at the India Office, should have been seduced into thinking otherwise for an instant . . . . . . Have you not altogether underrated the volume of our silver currency too ? A true silver subsidiary currency must, I maintain, be treated as a note currency, *i.e.*, it must be issued only in exchange for gold, and the State should be compelled to give gold for it, at convenient centres, on demand, everywhere. Only on these conditions will a silver subsidiary coinage be on a really sound footing ; and upon this footing even India will not want, I believe, more than 30 crores at the outset, if indeed she wants as much. You cannot seriously think we could *for a permanency* avoid calling in the 170 crores of rupees that we should have in excess of our wants. Nor can I seriously believe that an accurate thinker like yourself would deliberately consent to entrust to any Government on earth the power to issue token coinage at its discretion *to pass as full legal tender.* No human Govermment has yet existed who could be trusted with such a power."

5. "We are thus quite aware that our standard of value might be enhanced without any immediate change in the body of our currency ; and that we might, for a time, enjoy many of the advantages of a gold standard, without undergoing the expense of introducing a gold currency. But we wholly distrust the advice and conclusions of those who think that such a state of things could be tolerated permanently, or even for any considerable length of time : in other words, that we could introduce an enhanced standard, and yet, indefinitely, escape the obligation to introduce an enhanced currency."

"On the one hand experience has shown that gold coins in pockets or tills are of no use as a support to a note or token coin system. They are not available as a reserve, as they are not get-at-able at times of an internal or foreign drain. On the other hand, the question of a scarcity of gold has assumed great importance."[6]

He continues: "It will be generally admitted, I think, that whatever force the objections made by Sir Robert Peel and the late Royal Commission may have with regard to the adoption of the scheme in England, they are inapplicable to the proposed introduction of the system into India. Gold coins are not used there, and the acceptability of silver coins now in use will be disturbed rather than promoted if they have to compete with gold coins for public favour."[7]

In applying Ricardo's proposals to India, the only change needed was the substitution of sterling money for gold bars, and rupees for paper money. That would give India the sterling exchange standard, and so long as sterling was equal to gold, the gold exchange standard.

The following arrangements were suggested by Mr. Lindsay to give effect to Ricardo's proposals:—

1. The Indian mints will stop open coinage and issue rupees only in payment of Council bills.
2. The Bank of England will sell Council bills to all applicants at a fixed, profitable sterling price.
3. For every £10,000 of Council bills sold in excess of the sum required to meet the Home Charges, the Bank will purchase and ship to the Indian mints silver bullion, to be coined for payment of these Council bills.
4. The difference between the price paid for the bullion and the price obtained for the Council bills will be seigniorage earned by the Indian mints.
5. As soon as the Indian currency settled down at the fixed cost price, the silver clause in the Bank of England Act would be amended so as to admit of the silver portion of the note reserve being held in the Indian mints. The mints would be prepared to purchase, by granting drafts on the Issue Department of the Bank of England at 1*d.* below the Council bill rate, any rupees that might be tendered for conversion into sterling.
6. The rupees thus repurchased could be resold at a profit of 1*d.* each when the demand for Council bills revived.

Mr. Lindsay pointed out that under his scheme, the rupee currency would have two safeguards to make a token currency perfect—"a fixed issue price and a fixed convertible rate." It would expand and contract automatically, and, having a fixed value relatively to sterling, it would no longer follow the fluctuations in the price of silver bullion.

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[6] *Ricardo's Exchange Remedy* by A. M. L. p. 7.

[7] *Ibid.*, p. 7.

"In this way," he concluded, "a gold standard might be established in India without risk and with considerable profit to the State and the Bank of England, and with advantage to the London money market. There would be no increase in the demand for gold, and little decrease, if any, in the demand for silver."[8]

The demand for silver would not decrease because silver would be still required for the coinage of rupees. There would be no increase in the demand for gold, for the scheme eliminated gold coins completely.

5. OBJECTIONS

Mr. Lindsay anticipated many objections to the scheme, some of which we may notice.

The first objection is stated thus:

"It is said that the success of the scheme will depend on that doubtful factor, the balance of trade. If the balance of trade becomes adverse to India, the Indian currency will become redundant. A demand will arise for the conversion of the rupee currency into sterling. The conversion fund of £5,000,000 might be exhausted by this demand. And if so, it is argued that rupees will lose their extrinsic value, and exchange will fall till the rupee is worth its intrinsic value only."

Mr. Lindsay's answer was that the balance of trade had always been favourable to India and that there was every reason to anticipate that with a fixed exchange value of the rupee, the balance of trade would be more favourable than ever. If not, a fund of £5,000,000 would be ample "to cover all possible demands for conversion of rupees into sterling." The scheme ensured stable exchange under all circumstances. The rupee currency would run no danger of being over-issued. Why? Mr. Lindsay explains:

"Exchange may fall, but the fall will be limited, according to the period the redundancy is expected to last. It will be known that no fresh rupees can be issued until the redundancy ends and rupees regain their fixed issue price. There will thus be a fixed point of recovery, which the present Indian currency and all existing inconvertible currencies lack, and the exchange banks will be able to sell bills on London in the confident expectation that the rupees thus obtained will be resaleable ere long at the fixed issue price."[9]

Mr. Lindsay assumed automatic reduction in the circulation of rupees up to "a fixed point of recovery." He could not foresee that contraction might depend on the will of the Government.

Mr. Lindsay stressed the automatic working of the plan in answering another objection. It was stated that as Government would profit largely by the issue of rupees, they would be tempted to over-issue them.

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[8] *Ibid.*, p. 12.

[9] *Ibid.*, p. 17.

" This is a misconception." said Mr. Lindsay. " The currency will be automatic, and will regulate itself. There can be no over-issue, for the money will be issuable only at a fixed price ; and should redundancy occur, the money will be tendered for conversion into sterling. Besides, in all matters of this kind, the Government of India is subject to the check of the Home Government."

In view of the collapse of the gold exchange system during the first world war owing to the rise in the price of silver above the bullion par of the rupee, the following objection, and Mr. Lindsay's answer, will, be read with interest.

" If free coinage in the United States or any other cause should raise the gold price of silver above the rate adopted in India, the Government would be forced to issue rupees at a loss."

If the gold price of silver should rise above the Indian rate, said Mr. Lindsay, it would be necessary to fix upon a fresh sterling price for the issue of rupees. " This change would cause an unfortunate fluctuation in exchange ; but this fluctuation would be greater under the present system, and one fluctuation is less injurious than many."[10]

The Babington Smith Committee recommended the raising of the exchange rate to 2*s*. gold in 1920. In 1925 exchange was stabilised at the equivalent of 18*d*. gold.

Would not a fixed gold value of the rupee handicap the Indian producer unfavourably with his rivals in China and Japan, and deprive him of the advantages over his competitors in the West which he would enjoy with a falling rupee ?

Mr. Lindsay's answer was that the proper function of money was to act as a medium of payment and a standard for deferred payments : " It is not the duty of money to stimulate imports." Then, if one party gained from a falling exchange, another party lost by it—" Injustice of this kind should be stopped."

Finally it was objected that the scheme was a departure from the generally recognised principle that the safest and most acceptable cions were those which circulated at a value equivalent to the value of the quantity of metal they contained.

Mr. Lindsay's answer was that rupees of full value had proved to be a failure. Rupees bearing a fixed gold value deserved a trial.

Mr. Lindsay's scheme deserved notice as our currency system, as it developed after 1907-08, was in essence modelled on the lines of " Ricardo's Exchange Remedy " with the substitution of sterling for gold bars and rupees for paper money. And the restoration of the gold standard in the world after the first world war meant the setting up of the gold exchange standard, not the gold currency standard.

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[10] *Ibid.*, p. 21.

6. DEFECTS OF THE GOLD EXCHANGE STANDARD

It should not be supposed that as soon as a country has conferred an artificial gold value upon its silver coin the market price of silver becomes a matter of indifference. Violent fluctuations in the price of silver in either direction would destroy the system, or make it impossible to work. The essential feature of the gold exchange system is the use, for the purposes of internal circulation, of a token coin which is convertible into gold for foreign remittances at a more or less constant rate. When a token coin ceases to be a token coin on account of the rise in the value of its mettallic contents, the gold exchange system automatically ceases to exist.

The rise in the price of silver in September 1917 to 55*d.* put an end to our gold exchange system. The rupee ceased to be a token coin—there was profit in melting and exporting it. As the price of silver continued to rise, the maintenance of the old ratio, 16*d.* to the rupee, became impossible. The rise in the cost of production of the rupee compelled the Secretary of State to raise the price of rupees.

The liability of the gold exchange system to break down when the price of silver rises above the bullion par of the silver token is a serious defect of the gold exchange standard.

Bullion par means equality with bullion. If the gold value of the rupee is 16*d.*, a rise in the price of silver above 43*d.* per ounce will make its face value equal to its intrinsic value; if the gold value of the rupee is 18*d.*, a rise in the price of silver above 49*d.* per ounce will make it profitable to melt down rupees.

A second defect of our gold exchange standard was that the rupee was linked to sterling only; when sterling depreciated in terms of gold, the gold exchange standard was turned into the sterling exchange standard.

A third defect was revealed by the actual working of the currency system.

System not automatic.—Under an automatic system of currency, *e.g.*, the gold currency standard, when gold in circulation is in excess of the needs of trade, excess gold would be melted down or exported. Under the gold exchange standard, it may be supposed, that currency would be automatically reduced when foreign bills (Reserve Councils) are sold for token currency. But the reduction of the currency depends on the will of the Government. Government may reduce the currency by the full amount of the Reverses sold or by a smaller amount. This is shown by the following statement:—

Years.		Amount of Reverses sold £1,000.	Rupees received for Reverses sold. Lakh Rs.	Amount of contraction effected. Lakh Rs.
1907-08-09	...	8,058	12,16	12,16
1909-10	...	156	24	*Nil*
1914-15	...	8,707	13,16	1,05
1915-16	...	4,893	7,38	34
1918-19	...	5,815	7,08	*Nil*
1919-20-21	...	55,532	47,14	34,68

The Report of the Indian Currency Commission of 1925 refers to "the absence of contraction on occasions when the currency authority has had to sell sterling exchange." In 1920 the consequences were " disastrous." And the Report adds :

" There must ever be danger of such disaster under a system which does not automatically enforce contraction of internal currency with the depletion of reserves." (Para 16).

Three high officers of the Government of India (Sir Basil Blackett, Finance Member, Government of India ; Mr. McWatters, Secretary to the Government of India, Finance Department ; and Mr. H. Denning, Controller of Currency) were so much impressed with the defects of the gold exchange standard that in a Memorandum to the Currency Commission of 1925 they advocated the establishment of the gold standard in India with a gold circulation. They said :

" Undoubtedly the ideal to be aimed at is the system now in force in Great Britain, under which the note is the sole legal tender in circulation, and the gold value of sterling is stabilised by the statutary obligation imposed on the Bank of England to buy and sell gold at rates corresponding roughly to the par of exchange. It is impossible, however, to hope that conditions in India will for generations be such that a full legal tender metallic currency will be no longer necessary. If, therefore, a gold currency is not introduced, defects in the Indian currency and exchange system must remain indefinitely. There is, moreover, reason to suppose that the introduction of a gold currency would hasten the attainment of the ideal system, as the fact that notes were convertible into gold and not merely into an over-valued silver coin, would tend to increase confidence in the note-issue and to decrease the demand for metallic currency. The conclusion is that the only way of remedying all the defects in the system within a reasonable period is by establishing a gold standard with a gold currency in circulation."

The Currency Commission of 1925 rejected the gold currency standard as impracticable. It is still more so to-day.

CHAPTER IX

THE GOLD BULLION STANDARD

The gold bullion standard is Ricardo's exchange remedy, which has been mentioned above. Assume that the principal circulating medium is paper, not silver rupees, and that this paper is convertible into gold bullion at a fixed rate. There is no threat to paper currency on account of a rise in the price of note-printing paper. When the price of silver rises to the bullion par of the rupee, the gold exchange system disappears. But the intrinsic value of a paper note is zero. Secondly, under the gold bullion standard, the rupee will be directly linked to gold, not sterling. Thirdly, gold bullion will be given against internal currency in amounts not less than 400 ounces. In theory gold will be given in exchange for internal currency for all purposes. But it can never be the duty of the monetary authorities to meet the non-monetary demand for gold. The bullion market exists for that purpose. The condition that gold will be given in exchange for internal currency in amounts not less than 400 ounces will ensure that gold will be demanded for foreign payments only. Further, the Reserve Bank's obligations to sell gold will be so framed as to make it unprofitable for gold to be bought from it except in circumstances in which it would be profitable to do so for purely monetary purposes. The reasons for so framing this obligation are fully stated in Schedule I attached to the report of the Currency Commission of 1925.[1]

Briefly, the central gold reserves are meant to keep the external value of the currency unit stable. If the Central Bank endeavoured to meet the non-monetary demand for gold, which is considerable in India, a large part of its gold reserves might disappear. In such a case a heavy contraction of credit would be necessary in order to bring down prices, so that an increase of exports relatively to imports might induce a flow of gold to India. Such steps are taken in exceptional circumstances only. Ordinarily the central gold reserves would be used to correct a temporary disequilibrium in the balance of payments.

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[1] "It cannot be assumed that, in the case of India, gold movements can be confined to those for purely monetary purposes; unless, therefore, the Central Bank is relieved of the necessity of supplying gold within the two gold points of the exchange, it would be exposed to a constant drain upon its gold reserves for purposes other than those for which they are held. The gold and gold security reserves of a Central Note-Issuing Bank serve the purpose of rectifying a temporary disequilibrium in the balance of foreign payments. They are held to enable external obligations to be discharged pending an adjustment being achieved (by an appropriate credit policy) of the value of the currency to its parity with gold. The reserves exist to assure the maintenance at parity with gold of the purchasing power of the monetary unit, *i.e.*, to meet purely monetary needs. It is evident that, if they can be drawn upon in the ordinary course to satisfy non-monetary purposes to anything but a minor extent, the Bank's primary task, *viz.*, to maintain the external value of the currency, will be jeopardised. To avoid having its gold reserves depleted in these circumstances, and to replenish them when a drain occurs, the Bank has at its command but one weapon, that is credit control. It would have to follow a more or less permanent policy of so restricting the monetary circulation by a contraction of credit as to cause the rupee to appreciate beyond the upper gold point of the exchange. That is the only way in which gold can be attracted from abroad to make good the loss of reserves due to an internal drain. It is obvious that such a state of things would have highly injurious reactions on the internal economy of India, and should consequently be avoided."

1. DIFFERENCE BETWEEN THE GOLD EXCHANGE STANDARD AND THE GOLD BULLION STANDARD

It may be argued that the gold bullion standard is different from the gold exchange standard because, under the latter, gold is given for foreign payments only, while under the gold bullion standard internal currency is convertible into gold for all purposes. But we have seen that, in practice, under the gold bullion standard also, gold will be given for foreign payments only. Gold reserves are not meant to satisfy the non-monetary demand for gold. This is not an essential point of distinction between the two systems.

An important distinction between the gold exchange standard, as it operated in India, and the gold bullion standard is that the principal money will consist of paper, and not token silver rupees, under the gold bullion standard.

Under both systems the central reserves may consist of gold and foreign exchange. But under the gold bullion standard the currency unit is linked directly to gold. In the exchange crisis of 1907-08 over £8 million of gold from the reserves was used to meet foreign claims. That did not transform our gold exchange standard into the gold bullion standard. The rupee was linked to sterling only and the principal money in circulation was not paper but token silver rupees.

In his evidence before the Indian Currency Commission of 1925 Dr. Edwin Cannan said:

> "I think when you get on to the bare bones of the gold exchange system, there is very little difference between the two; some people say that this country (the United Kingdom) is on a gold exchange standard system now."

These people were right in so far as under both systems gold is given for foreign payments only; in this respect the difference between the two systems is nominal. The "bare bones" of the gold exchange system mean the mechanism for meeting foreign payments. But a gold exchange system may degenerate into a "foreign exchange system," as our gold exchange system did when sterling depreciated. A gold bullion standard, so long as it is maintained, is a gold bullion standard.

2. THE DIFFERENCE BETWEEN THE MANAGED GOLD STANDARD AND THE AUTOMATIC GOLD STANDARD.

Both the gold exchange standard and the gold bullion standard are forms of the managed gold standard. Exchange parity under both standards is not natural but artificial, and exchange stability is "man-made." Under the gold exchange standard an artificial gold value was conferred upon the rupee, 16*d.* in 1893, 2*s.* in 1920, and 18*d.* in 1925. Since paper money has no intrinsic value, under the gold bullion standard also the rate fixed for the conversion of paper into gold is artificial.

The mint par between two countries on the gold currency standard, or the full gold standard, is a natural par, *i.e.*, it is determined by the amount of pure gold contained in the standard gold coins of the two countries as defined by law. If the American dollar contains 23.22 grains of pure gold and the British sovereign 113.0012 grains of pure gold, one sovereign is equal to 4.866 dollars. This is a gold parity which may, under the given conditions, be described as a natural parity. A gold value equivalent to 4.866 dollars may be conferred on the British paper pound (sterling), but the parity would be artificial.

The full gold standard works automatically. When coinage is free, the supply of money will automatically adjust itself to the demand for it.

Suppose trade and industry require more money. The scarcity of money will reveal itself by a fall in commodity prices, or the purchasing power of money will increase. If an ounce of gold in the form of coins will exchange for more goods and services than an ounce of gold bullion, people will turn bullion into coins. It is possible to do so, because the mints are open to the free coinage of gold.

If the supply of money is at any time greater than the demand for it, the purchasing power of money in terms of goods and services will decrease, or prices will rise. The excess currency will be got rid of through the melting down of coins for export.

Under these circumstances the purchasing power of an ounce of gold bullion will be the same as that of gold coins equal to an ounce of gold.

Let us suppose that the balance of trade is strongly in favour of England so that England imports more and more gold. This gold is turned into coins and is added to the circulation. Prices in England will rise. When they have risen above the level of other countries, England will become a good market to sell in and a bad market to buy in; her imports will increase and exports decrease. The balance of trade will become unfavourable, necessitating the export of gold. If circulation consisted entirely of gold, gold coins would be exported, and the circulation thereby reduced.

3. DR. MARSHALL'S VIEW

The full gold standard works with the minimum of interference on the part of Government, and in this sense it is an ideal system. The *laissez faire* view of money was well expressed by Dr. Marshall in his evidence before the Indian Currency Committee of 1898 :—

"Q. 11,791. Before leaving that branch of the subject, will you say whether you regard the maintenance of the rupee at 1*s.* 4*d.* as equitable, and, at the same time, do you regard it specially as a tax upon trade?—The function of a legislator as regards currency is to do as little as possible. Almost any currency of which the position is certain will do its work fairly well. Frequent changes in its basis disturb expectation, upset reasonable calculations, and infuse a spirit of unrest into business. They may all aim at increased certainty, but their effect must on the balance be increased uncertainty. They resemble the frequent wakings of a patient to administer sleeping draughts. It was, therefore, with much doubt and difficulty that I brought myself to think that it was right to close the mints in 1893. But some of the strongest arguments against closing them are now arguments against reopening them and against acquiescing in any other arrangement than a 1*s.* 4*d.* rupee."

Dr. Marshall's meaning is clear. We may have the silver standard or the gold standard. The important thing is that the monetary system should be stable. certain and automatic. Our silver standard, based on the free coinage of silver before 1893, worked automatically; the supply of currency adjusted itself to the demand through new coinage, or the melting and export of rupees, according to the needs of trade. But there is no fixed rate of exchange between silver-using and gold-using countries. Since gold is used as a medium of payments in foreign trade, a gold currency standard is to be preferred to the silver currency standard.

Even under the full gold standard, the fluctuations in the rate of exchange are confined between the specie points by appropriate action on the part of the monetary authorities. In this sense exchange stability is man-made stability even under the automatic gold standard. But the monetary authorities interfere with the automatic working of the full gold standard only to rectify temporary disequilibria in the balance of payments, and their object is to assist the restoration of equilibrium as speedily as possible, and without violent fluctuations in prices or the balance of payments.

No change is introduced in the working of the automatic gold standard by the use of representative paper money. If paper money is backed by 100 per cent gold reserves, its quantity in circulation will fluctuate like a gold circulation.

Provided paper money is fully convertible, and a paper currency fluctuates like a gold currency, there is no objection, in theory, to maintaining a less than 100 per cent gold reserve against the note-issue. This was the principle on which the Bank Charter Act of 1844 was based. The quantity of the fiduciary issue was rigidly fixed, and all notes issued over and above this amount were to be backed by gold, pound per pound. The convertibility of the paper currency would, under such conditions, never be in doubt, and the whole volume of the circulation, consisting of gold coins and paper, would fluctuate as if it were composed entirely of gold.

We have seen that the gold exchange standard did not work automatically. This is an irremediable defect of the gold exchange standard. Mr. Lindsay supposed that when sterling was given by the Government in exchange for rupees, the rupee circulation would contract automatically. We have seen that the contraction does not take place automatically. It depends on the will of the currency authorities, and they may choose not to contract. In the absence of contraction, prices will not be lowered sufficiently, and the gold exchange standard would not work like the full gold standard.

4. MANAGED SYSTEM

In this connection we may consider the denial by the Chamberlain Commission that the gold exchange system was a managed system in a bad sense. The Commission approved of the measures adopted by the Government to maintain exchange during the exchange crisis of 1907-08 and rejected the Indian demand for a gold currency. The world gold production had increased between 1896 and 1914, the increase being accompanied by an upward movement in world prices. One of the arguments urged in favour of introducing a gold currency in India was that gold absorption by India would prevent an undue rise of prices in other countries. It appeared to the Commission unjust " to force gold coins into circulation in India on the ground that such action will benefit the gold-using countries of the rest of the world." (Para 66). The Commission said :—

" There remains the argument that without gold in active circulation India's currency system must remain a " managed " system, it being implied that a managed system is a bad system. The ideal with which this managed system is contrasted seems to be the system of the United Kingdom where fresh supplies of the only unlimited legal tender coins, the sovereign or the half-sovereign, can be obtained at will by anyone who takes gold to the mint for coinage.

" In our opinion this contrast is of no value. There does not appear to us to be any essential difference between the power to import sovereigns at will and the power to have gold coined into sovereigns in India. The only point of the criticism that India's currency system is managed in a sense that is not true of the currency of the United Kingdom lies in the fact that the rupee is a token passing at a value above its intrinsic value and at the same time is unlimited legal tender. It is true that it is not practicable even to consider the limitation of the amount for which the rupee is legal tender. In this sense therefore the system must remain a managed one. But we demur altogether to the idea that because it is to this extent a managed system it must be a bad system. It is not, in fact, possible for the Government of India to manipulate the currency for their own ends, and they cannot add to the active circulation of the currency except in response to public demands ". (Para 66).

The same point of view had been emphasized previously by the Prices Inquiry Committee of 1910. They had also maintained that the gold exchange system worked automatically, and that Government could not force rupees into circulation. So far as expansion of the circulation is concerned, rupees may be forced into circulation by presenting bags of rupees to any one who asked for them. The Government have never done that. The expansion of the circulation took place automatically when a favourable balance of trade led to the import of gold or Council Drafts, which were converted into rupees on the demand of the public. It is contraction which is not automatic. That contraction may not be automatic did not occur to the Chamberlain Commission. Experience has made us wiser.

What is true of the gold exchange system is true also of the gold bullion standard. Both are managed systems in the same sense. Under the full gold standard, much of the gold for export would come out of the circulation and the circulation would be automatically reduced by the amount of gold exported. Under the gold bullion standard, credit circulation may not contract in proportion to the gold lost—a reduced amount of gold in the reserve might maintain the same or even an increased amount of credit circulation. Again, if gold is being imported, it may be just bottled up, or not used to enlarge the credit circulation. Unless the circulation consisting of paper money and credit under the gold bullion standard is made to behave precisely like a circulation consisting entirely of gold coins, the system is not working automatically. Expansion and contraction are made to depend on the will of the currency authority, and not on the forces of demand and supply as under the full gold standard.

Both the gold exchange standard and the gold bullion standard are thus "managed systems." That does not mean that they are for that reason bad systems. They are bad when they are badly managed. The point that we note is that an artificial system may be misused, unconsciously, or deliberately, through ignorance, or of set purpose.

5. THE GOLD STANDARD BEFORE 1914

Before the outbreak of the first world war, gold actually formed part of circulation in the countries of the gold standard. The parities were gold parities and gold was freely exported and imported. There were restrictions on the export of goods in the shape of the tariff, but autarkie was unknown and such countries as England and Holland were the bulwarks of free trade.

The gold standard worked well. It guaranteed exchange stability. It did not guarantee stable prices. Prices of commodities and services rose appreciably between 1896 and 1914, or the purchasing power of money fell. But there was a general world wide rise of prices. The strict observance of the rules of the gold standard does not ensure " the sobriety of the price level," but it ensures that "each national price level shall be as drunk as every other."[2]

Can nothing be done under the gold standard to preserve "the sobriety " of the price-level ?

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[2] Crowther, *An Outline of Money*, p. 345.

6. THE COMMODITY DOLLAR

Irwing Fisher has discussed the question in *Stabilizing the Dollar.*

One must agree with him that a unit of currency is wanted primarily as a standard of value, not as a standard of weight. One must also agree with him that a standard should be invariable : "Imagine the modern American business man tolerating a yard defined as the girth of the President of the United States."[3] No, a yard so defined could not be tolerated—the standard of length would change with the President, and the same President may enlarge his girth during his administration.

But how is the gold standard to be rectified ? Fisher would keep the purchasing power of the dollar stable by varying its weight.[4]

Since constant recoinage is impossible, to put Fisher's scheme into practice it would be necessary to replace metallic money by paper, and to make this paper convertible into a variable quantity of gold. Changes in the purchasing power of money would be determined by means of a reliable index number of prices. The weight of the currency unit would be adjusted periodically according to the rise or fall in the general index number of prices—more or less gold will be given for the paper rupee. Why should a rupee be always equal to 8.475 grains of gold ? When prices are rising, more gold will be given for a rupee so that its purchasing power would increase. When prices fall, the rupee will be made lighter, so that its purchasing power will decrease. It is argued that the purchasing power of money may be thus kept stable by readjusting the amount of gold in the standard coin—or by making paper money convertible into a variable amount of gold.

The same object may be achieved under the gold bullion standard by varying the price at which the currency authority buys and sells gold. These prices in England were £3-17-9 and £3-17-10½ per standard ounce. Suppose commodity prices are falling and it is desired to raise them. The Central Bank may now offer to buy gold at a higher price than £3-17-9. The currency in the hands of the public will increase and prices will tend to rise. Suppose at another time prices are rising and it is desired to lower them. The currency authority may lower the price at which it sells gold, inducing the public to convert paper money into gold. The quantity of money in circulation will be reduced and prices will tend to fall.

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3. *Stabilizing the Dollar*, p. 83.

4. "I do not think that any sane man, whether or not he accepts the theory of money which I accept, will deny that the weight of gold in a dollar has a great deal to do with its purchasing power. More gold will buy more goods. Therefore, more gold than 23.22 grains will, barring counteracting causes, buy more goods than 23.22 grains, will buy. Therefore if the dollar, instead of being 23.22 grains, or about one-twentieth of an ounce of gold, were an ounce or a pound or a ton of gold, it would, other things equal, surely buy more than it does now, which is the same thing as saying that the price level would be lower than it is now," (*Stabilizing the Dollar*, p. 90.)

The basic idea of such schemes is that price changes can be remedied by suitable alterations in the supply of money. But changes in the quantity of money in circulation are no remedy against fundamental causes of disequilibrium in production and instablity arising from great inequalities in the distribution of income. We have also seen that short-period changes in the value of money, as in a trade cycle, have no very close connection with the supply of money. Prices may go on falling even when there is abundance of cheap money.

7. RULES OF THE INTERNATIONAL GOLD STANDARD

Gold ceased to be the medium of circulation after the first world war and the restoration of the gold standard in the post-war years meant the setting up either of the gold exchange standard or the gold bullion standard. The use of gold in circulation is not only wasteful, but there is not enough gold in the world to serve the purposes of currency. It follows that the international gold standard must be a " managed " gold standard. It can work successfully only under certain conditions :—

The first condition is a rise of commodity prices in the gold importing and a fall in the gold exporting country, so that gold is free to go where it is most needed.

There is also a second fundamental condition to be satisfied. England was forced to leave the gold standard in 1931 because, at the rate of £1 = 4.866 dollars, the external purchasing power of the £ was greater than its internal purchasing power. It follows that when a country returns to the gold standard, it should stabilize the gold value of its currency at a rate which neither over-values nor under-values the currency.

How is it known that a currency is over-valued ? If exports fall while imports do not fall, or when both exports and imports are falling exports fall more heavily, the currency is over-valued. A currency may become over-valued owing to a change in the terms of trade. The foreign demand for India's exports may tend to decline owing to improvements in the methods of cultivation in other countries, or other causes (*e.g.*, autarkie). The result will be a movement of the terms of trade against India. If, under these conditions, we maintain the gold value of the rupee at a high level, the balance of payments will turn against us.

These two fundamental conditions suggest other conditions :—

(*a*) There are always debtor and creditor countries. If creditor countries insist on the payment of their claims on account of interest or " reparations " in gold, and are unwilling to receive payment in goods, debtor countries may eventually be forced to leave the gold standard.

Creditor countries must have an unfavourable balance of trade, or they must re-invest interest and reparation payments abroad.

(*b*) All countries on the gold standard must have adequate monetary reserves—adequate for maintaining the gold value of the internal currency.

(*c*) When a country loses gold, it should be possible to bring down prices in the country by the restriction of credit. We assume a flexibility of costs, particularly wages, in the leading industrial countries. If wages do not fall, costs cannot fall.

(*d*) The operation of the international gold standard is facilitated by the stability of money-incomes and prices in different countries. The object of the Central Bank in each country should be to prevent violent fluctuations in prices and incomes, so far as that can be done through a prudent regulation of money-rates.

To the conditions enumerated above, one more may be added—"reasonably free conditions for the interchange of commodities." The international gold standard can work under tariffs, provided they do not unduly restrict the movement of goods. But if to high tariffs were added quantitative controls, in the shape of quotas, conventions and prohibitions, the international gold standard must break down. Why ?

The United States has made heavy investments abroad. If she insists on keeping out foreign goods by means of a high tariff and other means, how are debtor countries to discharge their obligations ? They will lose gold and may eventually be forced to leave the gold standard.

Restrictions on the movement of goods can become restrictions on the free movement of gold, even when no laws are enacted for the latter purpose. The result is mal-distribution of gold – inadequacy of gold reserves in many countries and accumulation of surplus gold in a few countries.

CHAPTER X

THE INTER-WAR PERIOD

The international gold standard broke down during the Great Depression. The causes of the breakdown are of theoretical as well as practical importance. We may begin with an examination of the forces governing the demand for and the supply of gold in the inter-war period, as gold is a basic factor in the working of the international gold standard.

1. THE DEMAND FOR GOLD

The demand for gold has a four-fold character. Gold is required for (*a*) industrial purposes, (*b*) private hoarding, (*c*) as minimum reserves principally against note-issue and (*d*) in the form of excess reserves to meet foreign indebtedness.

(*a*) The industrial demand for gold absorbed about 25 per cent of the gold production of the world in the nineteen twenties.

(*b*) So long as currency conditions were stable, little gold was hoarded in the West, but a considerable amount was hoarded in the East.

The Gold Delegation of the Financial Committee of the League of Nations thus speculated about the Indian demand for gold in the depression :

> " No doubt the present economic depression may result in some temporary weakening of the Indian demand ; on the other hand, it is quite possible that the recent decline in the price of silver will lead to increased purchases of gold. We understand that attempts are being made to extend banking and investment habits in India, but we do not think it would be safe to anticipate any material reduction in the Indian demand for many years to come. "

The Gold Delegation were entirely mistaken in this belief. After 21st September, 1931, India de-hoarded a considerable proportion of her privately held gold stocks, and hoarding began in the West.

(*c*) Practically in all countries Central Banks were required to keep a minimum percentage ratio of gold plus foreign exchange to their note-issues and other sight liabilities.

The gold reserves of Central Banks performed two functions : (*a*) cover function for the national paper currencies and (*b*) international currency function for the settlement of foreign indebtedness.

To economise gold the Gold Delegation of the League of Nations had proposed a general reduction of cover requirements, and a minority of the Delegation had even suggested the abolition of of cover requirements altogether. Several countries lowered their legal reserve requirements during the 'thirties (or slimmed the "Golden Calf"). Before 1939 they were abolished only by two countries, Italy and Germany. These two countries used up practically the whole of their Central Bank reserves of gold and foreign exchange.

(*d*) In the year 1936, 41 countries had gold reserves amounting to over 13,000 million dollars, while the amount legally required was 6,000 million dollars. The amount of "surplus gold" held by these countries was thus 7,000 million dollars. This gold was "surplus" from the point of view of internal requirements, but was available for international currency purposes.

The demand for international currency as we already know, is determined by discrepancies in a country's balance of payments. Agricultural countries had a relatively greater need for international cash reserves on account of the movement of the terms of trade against them and in favour of industrial countries.

2. FACTORS PROMOTING DISEQUILIBRIUM IN THE INTER-WAR PERIOD

These factors were three in number. (1) The initial rates of exchange of the 'twenties were out of harmony with the levels of income and costs in many countries. This meant over-valuation or under-valuation of national currencies. (2) Before 1914 prices in different countries, generally speaking, rose and fell together, showing a certain degree of co-ordination or "synchronization" of domestic conditions in various countries. In the inter-war period there was a marked trend towards monetary "autarkie". Countries were reluctant to have their domestic stability affected by booms and slumps elsewhere. Lack of synchronization increased the demand for international currency needed as a "buffer stock," to meet discrepancies in the balance of payments. (3) Before 1914 the movement of private short-term credits under the influence of changes in discount rates helped to check a foreign drain of gold. We have seen how the rise in the bank rate not only reduces the outflow of gold but attracts short-term funds for investment in the country. But in the 'thirties, a rise in the Bank rate came to be interpreted as a sign of weakness and a danger signal, and it produced the opposite effects. Short-term funds tended to move out when the Bank rate was raised for the support of a weakening exchange.

3. THE SUPPLY OF GOLD

The gold output of the world rose rapidly in the 'thirties under the influence of the rising price of gold. The quantity of gold mined in 1938 was twice as large as in 1928; devaluation increased its value to 3½ times that of the output of 1928. Devaluation stimulated production, and also meant a release of some gold from the cover function. For example, suppose £100 is needed as cover for note-issue. If devaluation increases the value of £100 worth of gold to £140, £40 is released from the cover function. Deflation would also release some gold from the cover function by reducing the volume of the notes in circulation. Tariffs and trade barriers, by reducing the volume of international trade, helped to reduce the demand for gold, thus relatively increasing the supply.

4. CENTRAL BANK RESERVES

The Central Banks of a number of countries held their legal reserves partly or wholly in foreign exchange in 1922-31 :

Foreign Exchange and Gold Reserves of European Central Banks in million dollars.

End of		1924	1928	1929	1930	1931	1932
Total 24 countries :							
Foreign Exchange	...	845	2520	2292	2300	1216	505
Gold	...	2281	3490	3841	4316	5273	5879
Total	...	3126	6010	6133	6616	6489	6384
Foreign exchange as per cent of gold	...	27	42	37	35	19	8

France

End of	...	1924	1928	1929	1930	1931	1932
Foreign Exchange	...	14	1287	1021	1027	842	176
Gold	...	710	1254	1633	2099	2699	3257
Total		724	2541	2654	3126	3541	3433
Foreign Exchange as per cent of gold	..	2	51	38	33	24	5

It will be seen that in 1928, of the total of foreign exchange and gold reserves of 24 European countries, a proportion as high as 42 per cent represented foreign exchange. The percentage fell to 8 in 1932. The figures for France are of special interest and have also been shown separately.

In 1924 the Central Banks of the following European countries held larger reserves of foreign exchange than gold : Austria (97 per cent), Danzig (100 per cent), Finland (64 per cent), Germany (63 per cent), Greece (75 per cent), Hungary (83 per cent), Latvia (64 per cent), Lithuania (67 per cent), Poland (71 per cent), Portugal (52 per cent) and Yugoslavia (84 per cent). The percentage of foreign exchange to the total reserve is shown in brackets.

5. FRANCE

France is held largely responsible for the breakdown of the international gold standard, and for that reason the French figures given above possess special interest.

Before July 1926 there was a flight of capital from France which lasted for several years, and which heavily depreciated the franc. In July 1926 determined action was taken by the French Government to balance the budget and to restore confidence in the franc. The value of the franc rose from less than 2¼ U. S. cents in July to 4 U. S. cents in December 1926, at which level it was stabilized legally in June 1928.

In August 1926 the Bank of France was granted the right to purchase gold and foreign exchange at market rates. During the next four or five years the Bank purchased enormous amounts of gold and foreign assets in order to prevent a rise of the franc above the fixed parity. Under a law passed in June 1928 the Bank was no longer permitted to buy foreign exchange and the Bank converted a large amount of foreign exchange, which it had bought under contracts of forward delivery, into gold.

From practically nothing in 1924 the foreign exchange holdings of the Bank of France rose to 1287 million dollars in 1928, and fell to 176 million dollars in 1932. From 710 million dollars in 1924 the gold holdings of the Bank rose to 3257 million dollars in 1932.

Three forces were at work to increase the gold and foreign exchange reserves of the Bank. In the first place the restoration of confidence in the franc led to the repatriation of French capital ; secondly, the total of French foreign assets was increased by the under-valuation of the franc which had turned the balance of payments in favour of France, and thirdly there were imports of speculative funds into France.

Dr. Sudhir Sen has made a special study of gold movements towards France during the period under review. (*Die Goldbewegungen nach Frankreich in den Letzten Yahren*).[1] The flow of gold to France, he says, is explained by the revival of confidence in the franc, the French creditors' distrust of conditions abroad, and the absence of rediscount facilities in France.[2] Joint-stock banks in need of liquid resources could not obtain assistance from the Bank of France through the rediscount of bills, as they can in the United States, or India. But French currency could be obtained by tendering gold. The joint-stock banks, therefore, converted their foreign assets into gold, which was tendered to the Bank of France in exchange for French currency.[3] It is pointed out also in the report of the Macmillan Committee that the new law of 1928 did not give the Bank of France the power to buy even French Government securities in the open market. Such purchases would have given banks and holders of securities deposits at the Bank, which they could have taken out in notes if they desired. " The Bank of France was thus practically deprived of two important instruments of modern central banking technique—the right to issue currency not only against gold but also against the equivalent of gold, and the right to increase the volume of credit and currency by operations in securities initiated by itself."[4]

" The fate of the gold exchange standard was sealed," says the League Report entitled *International Currency Experience*, " when France decided in 1928 to take nothing but gold in settlement of the enormous surplus accruing to her from the repatriation of capital and from the current balance of payments."[5]

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[1] Bonn, 1933.

[2] Pp. 37-38.

[3] P. 64.

[4] *Report of the Macmillan Committee*, p. 74.

[5] P. 39.

Between 1928 and 1932 the combined gold reserves of six European creditor countries (France, Belgium, Italy the Netherlands Sweden and Switzerland) increased by about 2,000 million dollars, while their central bank exchange holdings fell from 1878 million to 348 million dollars. During the same period the gold reserves of the remaining 18 debtor countries fell from 1,503 million dollars to 1,007 million dollars, and their central bank exchange holdings from 642 to 157 million dollars.

The increase in the international assets of the Federal Reserve Banks of the United States, expressed as percentage of total international and domestic assets at the end of the previous year is shown below for certain years :

1929	+6.3	1934	+25.2
1930	+1.9	1935	+31.9
1931	+1.3	1936	+12.9
1932	+4.7	1937	+ 2.3
1933	+6.5	1938	+22.8

6. REPARATIONS AND WAR DEBTS

Between January 1925 and January 1931 France and the United States received, on account of reparations and War-debt payments, 2,262 million dollars. In the same period their gold reserves grew by 1,520 million dollars. The connection between the import of gold by France and the United States and reparations and War-debts is clear.

" The breakdown of the gold standard must therefore be regarded as the combined result of the obligation to pay reparations and War-debts on the one side, and the unwillingness of the receiving countries to receive payment in the form of goods and services on the other "[6] (Sir Reginold Mant and Sir Henry Strakosh).

The breakdown of the gold standard might have been avoided if France and the United States had re-invested their favourable balances in debtor countries. Before 1928 Germany paid reparations with the help of loans from the United States. But after 1928 the United States wanted all her capital for her own use. Boom conditions existed in American industry, and capital was required both for investment in American industry and for speculative purposes. It also seems that Germany had exhausted her borrowing capacity.

Again, the collapse of the gold standard might not have occurred if the gold imported by France and the United States had led to a rise of prices in these countries. But they did not use the gold in a monetary way. It " was simply buried in the vaults of the Central Banks. Not only was the level of prices of these countries not raised

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6. *Report of the Gold Delegation*-(League, 1932), p. 67.

but was actually lowered as the price level fell in the rest of the world."[7] (Mant and Strakosh).

With this opinion Professor Gustav Cassel was wholly in agreement: He said: "The payment of War-debts in conjunction with the unwillingness to receive payment in the normal form of goods led to unreasonable demands on the world's monetary gold stocks; and the claimants failed to use in a proper way the gold that they had accumulated."[8]

This situation is described as the "sterilisation of gold." Sir Arthur Salter says:

"But as France and America did not need this extra gold it became in part 'sterilised,' that is, it was not used as the basis of as much money as in the countries from which it had come. The net result of this mal-distribution of gold was therefore to reduce the total amount of money in the world, and thus to exert a depressing influence on the general level of prices."[9]

About the fact of neutralization or sterilization of gold in France and the United States no doubt can be entertained. The question may be asked whether the neutralization was deliberate or automatic. According to the League Report *International Currency Experience* the neutralization of gold imports in the United States was "a deliberate policy," but "there were sound and compelling reasons for it."[10] The influx of gold into the United States was viewed with apprehension and anxiety. It was thought that within a short time the economic recovery of Europe and the re-establishment of European currencies on a gold basis would start a reverse movement of gold and therefore it was not considered safe to expand credit on the basis of the imported gold. "To have treated the incoming gold as the equivalent of gold received through the operation of the balance of payments between countries on a full gold standard and to have built a credit structure on it—assuming that it was possible to do so—would have meant first an enormous inflation, and later, when other countries began to rebuild their gold reserves, either a world wide deflation or the establishment of entirely new standards of the relationship between the world's gold reserve and the outstanding volume of credit."[11]

In the case of France as we have seen, the revival of confidence also played a considerable part in the accumulation of gold. The repatriated French capital was largely invested in Government securities. The owners of the funds either bought Government securities themselves or deposited the funds with their commercial banks, which enabled the banks to purchase Government paper.

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[7] Ibid., p. 67.

[8] Ibid., p. 67.

[9] *Recovery*, p. 39.

[10] P. 74.

[11] Ibid., p. 74.

The Government, in turn, was thereby enabled to repay a large part of its debt to the Bank of France, and later, even to accumulate a substantial deposit balance at the Bank. "The Bank of France welcomed this movement, but had no active part in it."[12] The influx of gold and foreign exchange made the French money market so liquid that when the Bank of France reduced its discount rate from 7½% to 3½%, there was no effect on its commercial port-folio. The League Report concludes: "The 'rules of the game'—a convenient but, of course, over-simple label—would have required an inflation of domestic credit to reinforce the effects of the gold inflow; but the country had just emerged from a period of inflation and was not in the mood for more."[13]

7. FOREIGN EXCHANGE RESERVES OF CENTRAL BANKS

The adoption of a gold exchange standard was officially recommended by the Genoa Conference which met in 1922 to consider the problems of financial reconstruction. A shortage of gold was apprehended, and the gold exchange standard meant economy in the use of gold. The world output of gold had declined by about one-third from 1915 to 1922 and it was feared that unless gold was economised, the re-establishment of the full gold standard would lead to a scramble for gold.

Even before 1914 Central Banks used to hold a certain amount of foreign exchange in their reserves In 1913 fifteen European Central Banks together held about 12% of their total reserves in the form of foreign exchange. The Indian currency system, while it was intended to develop on the lines of the full gold standard, actually took the shape of the gold exchange standard. The currency system of the Philippine Islands was also operated as a gold exchange system. The Argentine and Japan had, in effect, a sterling exchange system. But while outside Europe the application of the gold exchange standard made no further progress in the 'twenties, the gold exchange standard, as recommended by the Genoa Conference in 1922, came to be widely accepted in Europe. Central Bank Statutes were modified in many cases so as to permit Central Banks to hold foreign exchange instead of gold in their reserves against notes. The countries whose Central Banks at some time during the period 1922-31 were entitled to hold their legal reserves partly or wholly in foreign exchange included Albania, Australia, Belgium, Bolivia, Bulgaria, Chile, Columbia, Czechoslovakia, Denmark, Ecuador, Egypt, Estonia, Finland, Germany, Greece, Hungary, Italy, Latvia, Peru, Poland, Portugal, Rumania, Spain, Uruguay, U. S. S. R. and Yugoslavia. In addition there were other countries, yet without a Central Bank, but on the gold exchange system, for instance, India, New Zealand, Argentine and Venezuela.

This development would have pleased Mr. A. M. Lindsay, whose advocacy of the gold exchange standard produced no effect on the Indian Currency Committee of 1898. It is evident that such general application of the gold exchange standard reduced the demand for gold for the settlement of international indebtedness. The gold exchange standard was recommended by the Genoa Conference as an anti-deflationary device. The scramble for gold would have been intensified by the full gold standard and inevitably led to deflationary pressure. The wide adoption of the gold exchange system in Europe was helpful in avoiding this scramble, for a time.

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[12] P. 77.
[13] P. 77.

8. SOURCE OF CENTRAL BANKS' EXCHANGE HOLDINGS.

How did the Central Banks acquire their holdings of foreign exchange? Certain countries, for example, Austria, Hungary, Italy and Germany, received large foreign stabilization or reconstruction loans from the United States and the United Kingdom. A second source, in certain cases, was improvement in the current balance of payments. At times foreign capital was attracted by the expectation of currency appreciation. Suppose the Italian Lira was expected to appreciate from a rate of 100 for 1 £ to 90 for £1. Speculators in England would rush to purchase the Lira at 100 for 1£ and later convert the Italian currency into sterling at a profit. While the currency was appreciating, funds would flow into Italy, increasing the command of Italian banks over sterling. Differences in the rates of interest also induced, during 1925-28, a movement of large amounts of short and long-term capital from New York and London in particular to the countries adhering to the gold exchange standard. In the case of France, as we have already noted, two major causes were in operation, repatriation of private domestic capital funds and improvement of the current balance of payments resulting from the under-valuation of the franc. We have seen that in 1928, foreign exchange reserves of 24 European Central Banks amounted to no less than 42 per cent of their total foreign exchange and gold reserves, and also that in 1932 this percentage fell to 8.

The League report complains of variability in the degree to which Central Banks relied on exchange reserves as against gold. Some Central Banks were willing to hold a large portion of their total reserves in the form of foreign exchange, while others, for reasons of prestige, preferred gold. "The principal motive should have been a realization of the common interest, or in negative terms, the fear of a world-wide deflation. But individual countries were inclined to neglect the external repercussions of their actions, and the threat of a world deflation was, to each of them, a remote and ineffective sanction."[14] There is nothing surprising in all this. The primary object of the monetary, as also commercial policy, of each country is its own good. The world can take care of itself.

The gold exchange standard offered a "tangible bait" to its adherents in the form of interest on foreign exchange reserves. For example, the Reserve Bank of India's holding of sterling securities earns interest. Sterling deposits abroad owned by Indian banks would also earn interest. But there is also a danger associated with foreign exchange reserves. Their gold value would fall, inflicting losses far exceeding the gain in the form of interest, if the foreign currency depreciated. The fear of foreign exchange losses became an over-powering motive for the liquidation of foreign exchange reserves and helped to put an end to the gold exchange system.

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[14] *International Currency Experience*, p. 42.

9. EXPANSION AND CONTRACTION OF FOREIGN EXCHANGE RESERVES

The League Report, all too briefly, discusses the expansion and contraction of credit with the expansion and contraction of foreign exchange reserves. It is generally assumed that when such reserves are held at home, the appropriate expansion or contraction will automatically take place. But our own experience shows that it may not—or the working of the gold- exchange standard is not automatic. Another interesting question is whether expansion or contraction would take place abroad, when such reserves are held abroad. The answer depends to some extent on the form in which the reserves are held. "If they were held in the form of sight deposits with the Central Bank, such changes would have a strong effect analogous to gold movements, since they would involve additions to or withdrawals from the amount of Central Bank funds available for the domestic credit base."[15] The effect is weaker, though in the right direction, when the reserves are held in the form of deposits with commercial banks.

10. WHY ENGLAND LEFT THE GOLD STANDARD

It is admitted that England's return to the gold standard in 1925 was a mistake. When the gold value of the pound rose, internal costs and prices failed to adjust themselves to world costs and prices. Writing on the subject of "Depreciation of the pound and movement of internal prices" in the *Wirtschaftsdienst* for April 27, 1934, Dr. E. von Mickwitz said that already in 1926 there existed in many countries a considerable difference between world and internal prices, which increased in the following years. It was this difference which led to currency depreciation—a means of adjusting internal prices to the level of world market prices without deflation. Dr. E. von Mickwitz regarded England as a classical example of this. England abandoned the gold standard apparently under the pressure of withdrawal of loans by foreign countries, but her real object in going off gold was to bring about the adjustment of her costs and prices to world costs and prices.

The story of the financial crisis of 1931 may be thus summarised.

The Creditanstalt, a large Austrian bank, had suffered heavy losses in 1930. In May 1931 it was found in difficulties again. The Austrian Government came to its help, assisted by substantial advances by the Bank of England and the Bank of International Settlements. For the time the situation was saved, but on August 7 the Austrian Government requested the League of Nations "to proceed to an examination of Austria's economic and financial difficulties and to seek the means of remedying them."

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[15] Ibid., p. 41.

The weakness of Austria, revealed in May 1931, created a panic which spread to Germany and a run started on the Reichsbank, which lost 250 million dollars of its gold and foreign exchange in four weeks. On June 23, the President of the United States proposed a year's moratorium of reparation and war-debt payments. Later the British Government announced that it would not require the payment of its share of the reparations due on July 15. The Bank of International Settlements also rendered assistance in the shape of rediscount credit. An expert committee declared in the first week of August that withdrawal of short-term balances from Germany was "not justified by the economic situation of the country" and a "Standstill Agreement" was reached in the middle of August by which arrangements were made for the "continuation of credits to the German debtors" under certain conditions. But in the first seven months of 1931 Germany lost 2,900 million marks, of which 2,100 million marks came from the short-term liabilities of the banks. However, as the result of international effort, the situation in Germany improved and the Bank rate was reduced from 15 per cent on August 1 to 10 per cent on August 12, and 8 per cent on August 19.

When the run started on the German banks, the Bank of England began to lose gold. The Bank rate was raised but the drain continued. In the last fortnight of July the Bank lost over £30 millions. Uneasiness increased when it became widely known from the Report of the Macmillan Committee, published on July 13, that London had a large volume of short-term indebtedness. Its own short-term claims on Europe were smaller in amount and of little value on account of the financial situation in Europe.

The bank of England borrowed £50 millions from French and American banks at the beginning of August and a further £80 millions was borrowed by the Government from the same sources. Still the drain continued. In the two months preceding September 20 the London money market lost over £200 millions. Between Wednesday morning (September 16) and Saturday mid-day (September 19) London lost over £43 millions of short-term foreign funds. On September 21 came the suspension of the gold standard.

The immediate cause of the breakdown of the gold standard in England was the drain of gold. But, considering England's declining exports, this drain was bound to start even in other circumstances. It was impossible for England, on account of the over-valuation of the pound, to remain on the gold standard much longer.

It is interesting to note that the Macmillan Committee rejected devaluation. They thought that the lowering of the value of the £ as a deliberate measure, after the return to gold in 1925, would mean the adoption of "an entirely new principle" which would shock the entire financial world. The events of the two months following the publication of the Report showed that the Macmillan Committee had over-rated England's financial strength, and under-rated the strain of falling agricultural prices and declining demand on debtor countries and its reaction on creditor countries.

11. THE STERLING AREA.

The abandonment of the gold standard by England gave rise to competitive currency depreciation. The value of certain national currencies in March 1932 as percentage of their parities in 1929 was Canada 89.5, China 56.2, India 74.8, Iran 60.5, Denmark 74.7, Spain 51.8, Norway 73.1, Portugal 74.2, United Kingdom 74.8, Sweden 74.1, Australia 59.7, and New Zealand 60.3.

Currencies of different countries, however, did not fluctuate independently of each other. A great number of countries kept their exchanges *de facto* in a fixed relationship with sterling, the United States' dollar or some other currency. The two most important currency groups were represented by the sterling and the dollar. Before the outbreak of the second world war the following countries were included in the two groups.

Sterling Group—Argentine, Bolivia, Iran, Japan, Malaya, India, Denmark, Estonia, Finland, France, Greece, Iceland, Norway, Sweden, Portugal, Australia, New Zealand.

Dollar (*U.S.*) *Group*—Brazil, Chile, Columbia, Costa Rica, Ecuador, Gautemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Salvador, Venezuela.

The following table shows rates of foreign exchange (spot) quoted in London on June 22, 1939 :—

EXCHANGE RATES LONDON—SPOT

(Range of the day's business)

London on		Par of exchange per £	June 22, 1939
New York, $ (dollar)	...	4·86⅔*	4·68 - 68¼
Montreal, $ (dollar)	...	4·86⅔	4·69 - 69½
Paris, Franc	...	124·12†	176⅝ - 11/16
Brussels, Belga	...	35·00‡	27·52 - 54
Milan, Lira	...	92·46	88⅞ - 89⅛
Zurich, Franc	...	25·22½	20·76 - 78
Athens, Drachma	...	375	540 - 555
Amsterdam, Florin	...	12·107	8·81½ - 82
Berlin, Mark	...	20·43	11·66 - 68
Mexico, Peso	...	9·76	unquoted
Moscow, Rubles	...	...	24·81 - 81¼
Madrid, Peseta	...	25·22½	42⅛§
Lisbon, Escudo	...	110	110 - 110⅛
Warsaw, Zloty	...	48·38	24⅝ - 25⅛
Bucharest, Lei	...	813·8	650 - 670
Istanbul, Piastre	...	110	580 ...
Belgrade, Dinar	...	276·32	205 - 215
Oslo, Kroner	...	18·159	19·85 - 95
Stockholm, Kroner	...	18·159	19·45 - 45
Copenhagen, Kroner	...	18·159	22·35 - 45
Alexandria, Piastre	...	97½	97⅜ - ⅝
Kobe, Yen		24.58*d*.¶	13 15/16 - 14 1/16

*Par 8·23 31/32 since dollar devaluation on February 1, 1934. †Parity of 1928. ‡Prior to devaluation, April 2, 1935. §Official. ¶Pence per unit of Japanese currency.

An attempt was also made to control fluctuations of exchange due to speculative and abnormal causes with the help of special funds created for the purpose. These are known as Exchange Stabilisation or Equalisation Funds. Britain took the lead in establishing such a fund in 1931.

The sterling area has been described as "a great success in so far as it has proved the possibility of maintaining stability in a paper standard system." The prestige of the pound chiefly accounts for this success. There were strong commercial ties between the United Kingdom and the members of the sterling group. These countries protected the prices of their exports and safeguarded their position in the British market by allowing their currencies to depreciate with the pound. It was impossible for them to maintain their old gold parities under the new conditions without danger to their export trade. Take India for example. In March 1932, sterling had lost about 25 per cent of its gold value. That meant a rise of 33⅓ per cent in the price of gold. If we had not left the gold standard with England, the exchange value of the rupee in terms of sterling would have risen from 18*d.* to 24*d.* or 2*s.* In March 1939, the pound sterling had lost 43 per cent of its gold value, and so also the Indian rupee. If the 18*d.* gold rate had been maintained the exchange value of the rupee in terms of British paper money would have risen to about 2*s.* 8*d.* One can easily imagine the havoc which such a rate would have played with our exports, and the stimulus it would have given to imports from the United Kingdom and other countries with depreciated currencies. Our grievance is not that we went off the gold standard with England, but that we did not let the rupee depreciate earlier, and secondly, that we might have followed the example of New Zealand and Australia and allowed the rupee to depreciate below the sterling level.

The United Kingdom had also a large share in the import trade of sterling countries which rendered sterling balances useful as a reserve for these countries. But the value of these sterling balances in terms of gold rose and fell according to depreciation of sterling.

12. EXCHANGE RATES

While a number of countries maintained their old parities with sterling, the majority pegged their currencies to the pound at a discount from the old parity.

Sterling Value of Currencies.

	July 1939 as per cent of 1929 parity.		July 1939 as per cent of 1929 sterling parity
Egypt	100	Union of S. Africa	99
Estonia	100	Sweden	94
India	100	Norway	91
Iraq	100	**Finland**	85
Latvia	100	**Denmark**	81
Portugal	100	**New Zealand**	80
Thoeland	100	**Australia**	80
		Argentine	77
		France	70
		Greece	69
		Iran	68
		Japan	57

In January 1933 New Zealand changed her peg from £ (N Z) 110 to £ (N Z) 124 per £100, that is practically to the level of £ (A) 125 per £100 maintained by Australia, New Zealand's competitor in the sale of wool and other products.

The greater part of the increase in total reserves in the sterling area from 1932 to 1937 took place in foreign exchange. In 1938 there was a sharp decline in the proportion of foreign exchange in the reserves. This was mainly due to a shift from foreign exchange to gold reserves in four countries, Eire, Latvia, Norway and particularly Sweden.

13. THE POSITION OF THE CENTRE

Let us consider the sterling balances owned by members of the sterling group so far as they had been acquired by them in commercial transactions with the United Kingdom. They were invested in London in British Treasury Bills. There was thus an additional demand created for British Treasury Bills, and a shortage of supply was experienced by the British Clearing Banks. Now these banks were accustomed to maintain, in addition to a minimum cash ratio of 10 per cent a tradition of covering at least 30 per cent of their aggregate deposits by liquid assets, namely cash, call loans, and bills. The volume of commercial bills having declined, the banks were greatly dependent on Treasury Bills for their supply of " quick assets." The shortage of Treasury Bills, due to the increased demand for them on the part of sterling-area central banks, thus tended to check credit expansion in England.

There were also other inconveniences to which the Centre was subjected. Interest had to be paid to member countries on their sterling balances. While any member country could depreciate her currency below the sterling level, the United Kingdom could not meet the situation by herself going off sterling ! A more serious inconvenience arose from the fact that the sterling area of the ' thirties was not a " closed system." The member-countries had trade relations with agricultural countries outside the sterling area. The United Kingdom, " though itself a highly industrialised country, had to meet some of the strain falling on the sterling area from fluctuations in agricultural prices."[16] The Centre, however, enjoyed one compensating advantage. It could use its own currency, sterling, as a means of settlement throughout the large sterling area.

In the autumn of 1939, most of the non-British countries of the sterling area gave up their link with the pound. The sterling area became co-extensive with the British Commonwealth, excepting Canada. With the outbreak of war came exchange control, and the sterling area became a more coherent organisation.

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[16] *Ibid*, pp. 64-5.

CHAPTER XI

THE INTER-WAR PERIOD (CONTINUED)

1. THE RULES OF THE GOLD STANDARD GAME IN THE 'THIRTIES.

The Macmillan Report draws atttention to the assumptions of the 19th century philosophy of the gold standard: (*a*) That an increase or decrease of gold in the vaults of the Central banks implies respectively a "cheap" or a "dear" money, policy and (*b*) that a "cheap" or "dear" money policy affects the entire price structure and the level of money incomes in the country concerned. In the modern post-war world, adds the Macmillan Report, "neither of these assumptions is invariably valid." For example, gold imports into a country may be off set by sales of securities, which would prevent credit expansion. Gold exports from the United Kingdom could be offset by the creation of fresh credit by the Bank of England. If the level of British costs and prices was comparatively high, the mal-adjustment would not only not be corrected but intensified. It is the rigidity of the economic structure which makes it so difficult to make a policy of "dear" money effective. By means of open market operations the Central Bank may compel the member banks to follow its lead in restricting credit. But no pressure can be exercised on costs of production. "Dear" money in such circumstances would lower wholesale prices, leaving wages unchanged. Profits would vanish and the result must be large-scale unemployment. It is evident that changes in monetary policy do not invariably produce the effects which the old philosophy of the gold standard associated with it.

"The management of an International standard," says the Macmillan Report, "is an art and not a science." No formal code of actions, admitting of no exceptions and qualifications exists. But the following principles are generally accepted.

(1) There should be common agreement as to the ends for which the international gold standard exists.

(2) It should also be an object of policy to secure stability of prices as well as the stability of exchange.

(3) Action by individual central banks which, by repercussion on the policy of the others, imperils the stability of price levels should, as far as possible, be avoided.[1]

It may be noted incidentally that if the rules of the gold standard game were strictly observed, any increase or decrease in the gold reserve, with a ratio of 33 per cent, would create a three-fold expansion or contraction in the total credit base.

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[1] Pp. 23-24

2. CORRELATION BETWEEN CHANGES IN CENTRAL BANKS' INTERNATIONAL ASSETS AND DOMESTIC ASSETS

A careful study has been made of this correlation in *International Currency Experience.*

For the benefit of those who are not familiar with this term it may be explained that when two movements take place in the same direction, correlation is said to be positive. For example, the note circulation of the Reserve Bank of India expanded step by step with the increase in the Bank's holding of sterling securities during the war. The correlation between the two movements was thus positive. Correlation is said to be negative when, as one of the two variables increases, the other decreases, or *vice versa.* For example, in India, as the average area of the holding decreases, the number of bullocks per 100 acres of net sown area increases. The correlation between the number of bullocks and the average area of the holding is thus negative.

What was the nature of the correlation between the change in the Central banks' international assets (gold and foreign exchange) and their domestic assets (the credit base)? Was it positive or negative during the inter-war period?

For the years 1922-38 there are in all 382 observations. 121 observations have a *plus* sign (32 per cent) and 232 (60 per cent) have a *minus* sign. Negative correlation was far more frequent than positive correlation. But caution is necessary in the interpretation of the these facts.

(*a*) A lag in the process of adjustment is natural. When international assets decrease, it may be only after sometime, two or three years, that the Central bank begins contracting its domestic assets, or the credit base.

(*b*) At times there is a strong automatic tendency towards neutralization neutralization is not invariably deliberate. When there is an inflow of gold the money market becomes more liquid, and it may repay its indebtedness to the Central bank. The balance sheet of the Central bank will show an increase in gold and a decrease in domestic discounts and advances. The two movements being in opposite directions, correlation will be negative. Similarly, an outflow of gold, which reduces the funds available to the money market, may be automatically neutralised by an increase in borrowing from the Central bank on the initiative of the money market. The Central bank would not ordinarily refuse to lend to member banks if good security was offered.

(*c*) When the Bank rate is raised, or there is an open market sale of securities by the Central bank, international assets will tend to increase, and domestic assets will decrease. When the Bank rate is lowered, the local money market will become less attractive to foreign funds and ultimately there may be a reduction in international and a rise in domestic assets.

(*d*) As we have seen, neutralization in the United States was deliberate, but for good reasons.

In the United Kingdom, during the six years following the return to the gold standard in 1925, the Bank of England followed a systematic policy of neutralization. Its endeavour was to stabilize the total volume of credit available to the British economic system, irrespective of gold movements. The gold reserve ratio of the Bank of France rose from 47 per cent in 1929 to 80 per cent in 1934. No appreciable increase in the Bank's domestic assets occurred until 1935. The League Report says: "Neutralization of disequilibrating capital movements was indeed quite common throughout the nineteen-thirties."[2] Again: "No country that experienced a fall in its external currency reserve failed to offset it in part or whole,"[3] But there were also exceptions. In 1936 in Austria, Hungary and South Africa, a reduction in gold and foreign exchange reserves was accompanied by a reduction in domestic Central bank assets.

Neutralisation is a violation of the rules of the gold standard game. The Report of the Gold Delegation of the League of Nations said (1932): "There must be adequate assurance that what is sometimes called "the rules of the game" of the gold standard should well be observed, that is to say, that gold will be allowed to work freely and will not be unduly accumulated in any country without being allowed to exercise its normal influence in raising the level of prices." Again: "Open market operations . . . . should be employed rather to intensify than to deaden the semi-automatic influence of gold movements."

This means that when gold is coming into a country and prices are tending to rise, the Central bank should begin to buy securities in the open market, adding further to the supplies of money. The rise of prices would be stimulated, and the imported gold would be thereby induced to leave the country. When gold exports have led to a contraction of credit, the sale of securities by the Central Bank would intensify the deflationary effect, causing prices to fall, which would place the country in a position favourable to gold imports.

It may be doubted whether any Central bank can give its unqualified support to such a principle of open-market operations. The action taken by a Central bank depends on circumstances, and circumstances may demand neutralization of gold movements.

Neutralization in the inter-war period arose largely from the desire of countries to maintain a stable national economy. A national economy becomes unstable when fluctuations in its balance of payments, which give rise to gold movements, make a country share booms and slumps elsewhere.

3. THE "CUSHION"

The whole amount of the gold and foreign exchange reserve of a central bank which is in excess of the legal cover requirements for the note issue is theoretically available for the purposes of international currency. But in the inter-war period, central banks usually endeavoured to keep a "cushion" above the legal minimum, for fear of having to break the law.

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[2] *International Currency Experience*, p. 79.

[3] *Ibid.*, p. 84.

4. MOVEMENT OF GOLD AND THE MOVEMENT OF GOODS

The principal factors in the classical theory of adjustment are gold flows, changes in the quantity of money and changes in relative price levels.

But a stable exchange regime is perfectly conceivable without any gold. Even under a gold standard the movement of gold may be and is obviated by sales or purchases of foreign bills and balances. It may be rendered unnecessary by the movement of goods. There is an "unmistakably close connection between international payments and the movements of commodity imports and exports." (Taussig).

The movement of goods is easily explained. The balance of payments tends to affect not only the stock of money but also the flow of income, and for that reason, expenditure. Suppose a country's exports rise without a similar rise in imports. There is, then, an addition to income. Of this additional income, earned in the export industries, only a small fraction will presumably be spent on imported goods, and the bulk will be spent on home-produced goods. The level of income in the home-industries will thus rise, and eventually the demand for imports must increase. Increased exports thus tend to be balanced by increased imports. In the case of less advanced countries, the increased savings made possible by a rise of national income may be invested in imports of capital goods.

A good illustration of the process of adjustment through the movement of goods is provided by Germany. In 1926 there was a sharp decline in the net flow of capital into Germany from foreign countries. "The German balances of trade—partly through a rise in exports but mainly through a fall in imports—adjusted itself to this great and sudden change with astonishing rapidity."[4] While adjustment was thus taking place, (*a*) the Central Bank of Germany gained instead of losing gold, (*b*) it lowered its discount rate; (*c*) both note-circulation and commercial bank deposits increased during the year, and (*d*) the domestic price-level slightly rose while general prices in U.S.A and England fell in 1926 as compared with 1925—phenomena which are not in harmony with the classical theory of adjustment.

Gold exports from India in the 'thirties caused satisfaction in official circles. An argument advanced in their favour was that they encouraged the flow of international trade. Our Finance Member (Sir George Schuster) said: "India in fact has been able to release into the world a commodity for which alone there is an undiminished market and the possession of which, if it is used as a basis for currency, does not diminish but rather increases the purchasing power of the countries which absorb it." (Para 19 of the budget speech for 1933-34). If the authorities in India had been less anxious to promote the good of the world than they apparently were, they might have chosen other methods of adjusting our economy to the conditions created by the Great Depression. A fall in the rate of exchange below the sterling level, and a deliberate and drastic reduction of imports would have lessened the outflow of gold. Gold is a commodity, but of a special kind. International payments are best adjusted through the movement of goods, and it should be the object of Government policy to assist and promote such adjustment, thus conserving gold supplies for other purposes, *e. g.*, import of capital equipment.

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[4] *Ibid.*, p. 102.

5. EXCHANGE DEPRECIATION IN THE EARLY 'TWENTIES

At the end of the first world war, commodity stocks had been exhausted in many European countries—there was a lack of raw materials and a lack of food stuffs (which is being experienced much more acutely at the end of the second world war). There was an intense need for imports of commodities, and several countries developed heavy import surpluses. There arose consequently a great need for foreign exchange to pay for the surplus imports, and there was inevitably a fall in the rate of foreign exchanges. The depreciation of national currencies was exaggerated by reparation payments. Finally unbalanced budgets led to the creation of money with the help of the printing press, and inflation was a direct cause of exchange depreciation in many countries.

The depreciation of the German mark attracted world attention and gave rise to heavy purchases of the rapidly depreciating German currency in the expectation of huge profits which would be made when stabilization came. Suppose you buy marks at the rate of £1 = 1,000,000 paper marks, and when stabilization comes, 20 marks are equal to 1£. How easily is £1 turned into £50,000! The present writer remembers a letter which appeared in a Lahore daily in those days suggesting that by investing £1 in German paper money, one might go round the world and return to Lahore richer than before. Speculators not only in India but all over the world made large investments in marks. These investments turned out to be free gifts of capital by the outside world to Germany. When stabilization came (1924) the new paper mark was made equal to the old gold mark (£1 = 20 gold marks), but the new paper mark was also made equal to 1,000,000,000,000 depreciated paper marks. Only foreigners who had used their paper marks to buy goods or real estate in Germany possibly benefited by their transactions; the others lost heavily.

In the earlier stages exchange depreciation attracted considerable sums to Germany; in the later stages, when the real character of the depreciation came to be better understood, and when a given fall in the gold value of the mark was expected to lead to a heavier fall in the next few days or hours, there was even a flight of capital from Germany. Exchange depreciation is not a reliable method of attracting foreign capital, apart from the questionable moral aspect of the proceeding.

6. EXCHANGE AND PRICES

We have said above that when money is depreciating rapidly, prices generally rise at a rate faster than that of increase in the quantity of money. This is due to an enormous increase in the velocity of circulation.

Fluctuations in the gold value of the currency act directly on prices when money is depreciating rapidly.

One still remembers a joke of the early 'twenties, which appeared in a German humourist paper (*Lustige Blaetter*). A German went into a barber's shop to get a shave. The price of the service was agreed upon before the barber commenced operations. When he had finished about half his work, he heard a newsboy shouting in the streets that the dollar had risen. He stopped immediately and said to his client : " Sir, the dollar has risen and I must charge you more." The end of the story—whether the client elected to stay or went away with half his chin shaved—is immaterial. But it is a fact that in those days every rise in the dollar immediately led to a rise of prices (reckoned in paper marks) before *V* or velocity had time to increase. If prices are to rise because money is changing hands more rapidly, money must have time to change hands more rapidly. But if prices rise in the same instant with the dollar, *V* has not intervened. If, with a rise of 20 per cent in the dollar, prices immediately go up 20 per cent, the rise of prices is directly due to the action of exchange.

In the illustration of the barber and his client (it is more than an illustration) *P* varies as soon as exchange varies. *P* varies before *V*.

Aftalion says : " If we now consider countries where flight from currency has incontestably existed, is it certain that there (at least) it is acceleration of *V* that determined prices ? The quantity theory would affirm that facts which bring about the external depreciation of national currency, at the same time create such distrust of national currency that there is a rush to convert it into goods, and that increase in the velocity of circulation thus bears the responsibility for the rise of prices. But is it not more simple to say that external depreciation has, as its consequence, internal depreciation of the national currency, *i.e.*, a rise of prices ? Why should the variation of *V* be a necessary intermediate link between the two depreciations ?"[5]

7. EXCHANGE DEPRECIATION AND EXPORTS

France had a freely fluctuating exchange between 1922 and 1926. Exchange depreciation at first reduced her import surplus and even caused an export surplus. But later, when exchange declined further, each fall in exchange tended, not to restrict but to stimulate imports. Anticipating further depreciation and a further rise in prices, importers imported more, not less. Exchange depreciation thus led to no improvement, but worsening of the balance of payments. The experience of the United States in 1933 was similar.

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[5] *Monnaie Prix, et Change* by *Aftalion*, p. 164.

8. TEST OF OVER-VALUATION

French currency was stabilized at the end of 1926. The British pound had been stabilized earlier in 1925. We have referred to the over-valuation of the pound above more than once.

It may be interesting to learn that during the period 1925-30, there was little sign of disequilibrium in the British balance of payments. The Bank of England's gold reserve remained, on balance, practically constant during those six years, and the drain, which led to the abandonment of the gold standard did not begin till July 1931. The League Report says:

> "A country may have a rate of exchange such that its balance of payments can be kept in equilibrium only by a contraction of total domestic income and demand; and if wages and prices are rigid, such a contraction must operate through unemployment."[6]

It is possible to maintain a high gold value of the currency—but at a certain cost. Deflation, involving as it does a heavy contraction of income and demand, may be successful in keeping the balance of payments in equilibrium. This is one method of adjusting costs and prices to a high gold value of the currency. But if wages cannot be reduced, adjustment will be made through large-scale unemployment and depressed business conditions. Such were the effects of over-valuation in England during 1925-30. Unemployment thus is a better test of over-valuation than an unfavourable balance of payments.

The abandonment of the gold standard by the United Kingdom stimulated British exports. The pound now became under-valued. The devaluation or depreciation of other currencies diminished and finally removed this stimulus.

9. THE GOLD BLOC

Just as the suspension of the gold standard by the United Kingdom was followed by the depreciation of many other currencies, the devaluation of the dollar also led to exchange depreciation in a large group of countries, including some countries (*e.g.* Argentine, Brazil, Canada) where some degree of depreciation had occurred earlier.

But still an important Gold Bloc remained which valiantly endeavoured to maintain their currencies at pre-crisis or pre-war (1914-18) gold parities. The leader of this Gold Bloc was France; other prominent members were Holland, Switzerland and Belgium.

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[6] *Ibid.*, p. 126.

The devaluation and depreciation of a number of currencies had created a situation extremely unfavourable to the countries of the Gold Bloc. Their currencies were now very much over-valued, which penalised their exports. But they prepared to defend their gold parities by all the means in their power. The chief method employed for this purpose was deflation. If exports are declining because the currency of a country is over-valued, thus rendering its exports dear in terms of depreciated currencies, wages, interest and other elements of cost, as we have seen, must be drastically reduced. That is how equilibrium may be restored between internal and world costs and prices. But if a country carries a heavy load of public debt, taxation to meet the annual interest charges is heavy. Heavy taxes raise industrial costs. Therefore it is necessary to effect economies in Government expenditure. An unbalanced budget and deflation do not go together. From time to time, in the countries of the Gold Bloc, economy drives were enforced, and attempts were made to reduce both Government expenditure and costs of production. " The result was, of course, a curtailment of purchasing power and an accentuation of the depression."[7] These haphazard efforts were succeeded by " consistent deflation " which attempts to reduce prices, rents, wages, etc., through Government intervention. This " method of self-castigation " was first adopted by Italy; Germany, Belgium, France and other members of Gold Bloc followed Italy's example.

Commodity prices fell in these countries, but the result was an increase in the burden of public debt. " The burden of public debt made it impossible to balance the budget even on a lower plane." The efforts of the Gold Bloc to resist devaluation by co-operation were fruitless. " Co-operation confined itself to technical arrangements and to vague schemes of tariff concessions which never materialised." It became evident that the Gold Bloc must break up. The weakest link in the chain was Belgium, and the Belga, Belgium's currency unit, collapsed after a heroic resistance in March 1935. The chief industrial rival of Belgium is England, and the heavy depreciation of sterling had given a great advantage to British over Belgian manufacturers. The Government of Belgium attempted to reduce this disadvantage through deflation. A flight from the Belga began which " assumed spectacular dimensions at the end of 1934." The situation rapidly and miraculously changed after devaluation. " Trade activity increased as a result of better export possibilities and the moderate rising trend of prices." Confidence in banks was restored and there was a " heavy surplus of foreign funds from abroad, since the Belga inspired confidence at its devalued level."[8]

The experience of Holland and Switzerland was similar. Considerations of prestige in their case were more important than in that of France. France had devalued its currency in 1928,

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[7] *World Finance*, by Paul Enzig, p. 22.

[8] *Ibid.*, p. 32.

After the depreciation of sterling and the Scandinavian currencies, Holland and Switzerland alone were maintaining the value of their currencies at their pre-war parities. " It was considered a matter of prestige, both in Holland and Switzerland, that their currency should be the last to yield to the world pressure for devaluation."[9] They yielded finally. The collapse of the Belga and devaluation in Belgium led people in other countries to expect devaluation in the other countries of the Gold Bloc. Capital began to leave Holland, and then Switzerland.

The flight from the Dutch guilder and the Swiss franc abated toward the middle of 1936, and it appeared as if Holland and Switzerland had overcome the crisis which followed the devaluation of the Belga. But they had ceased to be the centre of world attention because of the crisis that had been developing in France, which led to the devaluation of the French franc.

A Tripartite Currency Agreement was concluded between the United States, France and England in September, 1936, in virtue of which France devalued the franc. Further devaluation of the franc followed in 1937.

Devaluation was generally followed by a domestic expansion of investment and national income. The League Report says : " No country achieved recovery without some measure of monetary expansion. If the leading industrial nations had initiated, by whatever methods appropriate to local conditions, a simultaneous policy of monetary expansion in, say, the spring of 1931, they would probably have had little difficulty in keeping their mutual exchange rates stable."[10] It seems to be a case of being wise after the event.

10. EXCHANGES OF PRIMARY PRODUCING COUNTRIES

In view of the sanctity attaching to the 18*d.* gold rate between 1927 and 21st September, 1931, and to the 18*d.* sterling rate thereafter, it is interesting to examine the exchange experience of other primary producing countries of the world in the inter-war period.

In 1929-30 agricultural countries such as Australia, New Zealand, the Argentine, Uruguay and Brazil, were the first to allow their currencies to depreciate ; others followed suit after the depreciation of the pound. In some cases exchange fluctuations in the early 'thirties followed quite closely the fluctuations in the prices of certain export products on the world market. The League Report traces " a clear correlation " between the exchange value of the Brazilian currency and the dollar price of crude petroleum. The currency of Brazil tended to move with the dollar price of coffee. Bolivia went so far as to adopt an official scale in 1932 linking the exchange rate directly to the price of tin in London.

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[9] *Ibid.*, p. 37.

[10] *International Currency Experience*, p. 130.

A sliding-scale exchange (if Bolivia's scheme may be so called) would not give protection to primary producers against contraction of foreign demand. But during the Great Depression it was not so much the decline in the quantity of exports which ruined the grower as the fall of prices. A sliding-scale exchange ensures that the grower will receive the same amount of national currency for a given quantity of exports in spite of the fall of prices.

The League Report accepts exchange fluctuations 'as a normal feature' of the monetary policy of agricultural countries, in view of the wide cyclical fluctuations to which the prices of primary products are subject. The Central Bank of Chile wrote in 1938: "As the Latin American countries are primarily producers of raw materials and food-stuffs, the wide fluctuations in the prices of those products, which are extremely sensitive, may affect their economic life to such an extent as to make it impossible for them to maintain the principle of a rigidly stable currency."[11]

As an alternative it is suggested in *International Currency experience* that in good times central banks in primary producing countries should absorb the surplus of the balance of payments and reduce their domestic assets. When bad times come, the deficit in the balance of payments should be met by selling foreign exchange, and excessive deflation prevented by a cheap money policy. Such a policy assumes effective control of credit by the central bank. In countries like India this control is a myth.

A better solution is the diversification of economic structure, or industrialization.

The position of backward agricultural countries becomes still more difficult when the 'effect of cyclical fluctuations' in prices is reinforced by structural changes in demand and supply. Let us take two countries A and B, both producers of primary commodities. Technical advance takes place in A which reduces A's costs of production, while agriculture in B cannot be easily modernized. Our farming, for example, is subsistence farming, and excessive numbers are dependent on it—the individual peasant works on a small scale and is resourceless. To modernise our agriculture, individual farming must be replaced by collective methods, permitting the use of modern machinery. This will be a work of time and labour. Under such conditions, the only method of relief, which is immediately applicable, is through a fall in the rate of exchange. The problem of backward agricultural countries has a two-fold aspect—they need protection against industrial countries on account of the unfavourable movement of the terms of trade, and against the competition of advanced agricultural countries. Exchange depreciation which may be judged adequate in the case of the latter, may prove inadequate for backward growers.

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[11] *Ibid.*, p. 135.

11. EXCHANGE STABILIZATION FUNDS

"An Exchange Equalization Fund is a collection of assets segregated under a central control for the purpose of intervention in the exchange market to prevent undesirable fluctuations in the exchange rates."[12]

An exchange equalisation fund derives its resources from :

(*a*) the 'profit' of a gold revaluation.

(*b*) the issue of new government securities.

When currency depreciates or is devalued, there is a "profit" on the revaluation of central gold reserves, that is to say, there is an increase in the value of the gold reserves. The difference may be segregated in the form of a separate Fund. This was done in the United Kingdom when the British Exchange Equalization Fund was created. Special government securities are also created for the benefit of such Funds.

An Exchange Stabilization Fund is controlled by Government and is not subject to the control of the Central Bank. It also works in secret, and not openly as the Central Bank.

The chief objects of such funds are (*a*) to deal with exceptional inflows and outflows of gold ('hot gold' or refugee capital), (*b*) to counteract speculative activity on the exchange market, and (*c*) to offset short-term fluctuations due to seasonal changes in the supply and demand relations between particular currencies.

(*a*) Suppose there is a "flight from currency" in Holland and Belgium, and the capital taking flight is seeking refuge in Britain. The demand for sterling in these countries would raise the price of sterling sharply ; when foreign capital is repatriated, sterling would fall heavily. To avoid violent fluctuations in exchanges on account of such inflows and outflows of capital, the British Exchange Equalisation Account acquires these funds when they are flowing in, and releases the gold when they want to leave the country. When foreign gold is bought, it is neutralised or sterilised so that the stability of the domestic economy is not disturbed by the inflow of capital. It can leave as quietly, without producing any contraction of credit.

(*b*) Anticipating a rise in exchange speculators may begin to buy a currency, and by their very buying bring about a rise. Now if the Fund is ever ready to sell or to buy, as the case may be, and it has adequate reserves of both gold and the national currency, it can deal with the speculators effectively. The anticipated rise or fall would not come off, and the speculators would be taught a wholesome lesson.

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[12] *International Currency Experience*, p. 143.

(*c*) Suppose an industrial country has to make heavy payments to an agricultural country for crops which are imported at a particular time. The requisite funds may be provided by the Exchange Equalisation Account, and thus a sharp movement of the rate of exchange in favour of the agricultural country, or a group of agricultural countries, avoided.

While in theory the British Equalisation Account is concerned solely with ironing out exchange fluctuations due to the three causes mentioned above, in practice it is found impossible to confine the activity of the Fund within these limits. This is also true of such funds in general. Exchange funds are used to establish and defend "appropriate levels"—they do not watch general trends in the exchange with indifference.

The British Exchange Equalisation Account was established in 1932. Two years later the American Stabilization Fund was created. Its "dominent purpose was retaliatory."[13] The Fund was to "defend" the dollar, which meant that the dollar was to be prevented from rising in value in terms of other currencies, particularly sterling. The smoothing of "undue" fluctuations was a minor objective.

The major objective of the French Fund was to combat speculative activity and to control abnormal capital movements. "At the outset its duty was to confine the fluctuations of the franc in terms of gold currencies within certain prescribed limits. Resistance to trend was the essence of its task."[14]

Belgium, Swiss and Dutch Funds were established to maintain their respective currencies at the newly chosen levels in terms of the major currencies.

Exchange stability is the objective of all Exchange Stabilization Funds. This includes not only the control of short-term causes of instability, but the combating of undesirable trends.

12. THE MOVEMENT TOWARD STATE CONTROL OF EXCHANGE

Is the regulation of currency and exchange, which is a central banking function, passing into the hands of government? "The statement is broadly true," says *International Currency Experience*, "but it needs qualifications in some respects." The qualifications are the following :—

(1) When devaluation leads to a revaluation of central gold, Exchange Funds provide a convenient side-account for holding the "profit." They assist the administration of the trade cycle policy by separating the international from the domestic reserves of the country. In a time of crisis the entire available international reserve may be mobilized through their agency. For example, when the war broke out, all the gold of the Bank of England was transferred to the Exchange Equalization Account for the support of sterling.

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[13] *Ibid.*, p. 144.

[14] *Ibid.*, p. 144.

(2) Central Banks also regularly intervene in the exchanges not only to iron out undue fluctuations but to resist trends. But such intervention on their part may produce undesirable repercussions on their domestic credit policies, which are avoided by the use of an Exchange Fund.

(3) A separate Exchange Fund provides means, first of separating the international from the domestic reserves of the country, and then establishes a flexible connection between them.

13. INTEGRATION OF EXCHANGE AND TRADE CONTROLS

Trade controls, for example, tariffs and quotas, limit the movement of goods, while exchange control is directly concerned only with the payment for goods. But difficulties arise when the two controls are worked independently of each other. For the sake of argument let us assume that there is a single importer of cotton goods in India. He imports a certain quantity of cotton goods under the given tariff and quota conditions. Next he approaches the authorities for exchange allocation. If he is not enabled to pay for the imports, a blocked commercial balance will be created, that is to say, there will be British exporters of cotton goods to India who will remain unpaid because foreign exchange has not been made available for meeting their claims. Such difficulties led to the integration of exchange and trade controls. Imports were not admitted unless the importers could show the customs officers an exchange permit guaranteeing the allocation of foreign exchange to pay for them. Importers were required to obtain exchange permits prior to importation.

14. BARTER, EXCHANGE CONTROL, CLEARING AND PAYMENT AGREEMENTS

Barter or " compensation deals " were frequently arranged in the 'thirties. Such transactions also arose out of exchange difficulties. If Italy will accept Mexican oil in exchange for a tanker which Mexico wants, the need for foreign exchange to that extent is obviated. Barter arrangements may cover all purchase and sale transactions between two countries, exports and imports being balanced over a period, generally more than a year. Such arrangements are then known as clearing agreements. Clearing agreements are useful for they enable goods to be still exchanged between two countries both of which have prohibited the transfer of foreign exchange, whereas in the absence of such an agreement, trade must finally cease. When a clearing agreement has been entered into between a debtor and a creditor country, the excess of exports from the debtor country is earmarked for the payment of the debt services.

Payment agreements represent an extension of clearing agreements. Clearing agreements relate to trade in commodities, to exports and imports of goods. When clearing agreements include arrears of commercial debt, payments on account of tourist traffic, remittances of capital abroad (*e.g.* Jewish payments to Palestine), and interest on foreign loans, they are known as payment agreements

In essence there is not much difference between a clearing and a payment agreement. Under a payment agreement between Germany and the United Kingdom, concluded in November, 1934, 55 per cent of German exports to the United Kingdom were to be used to finance German imports from the United Kingdom, and the rest for the debt service. On the British side there was no longer any need for a clearing office or for official certificates. But Germany had to undertake to do all necessary controlling of trade and payments on her side, so as to maintain the ratio agreed upon and to ensure the prompt settlement of accounts. The payment agreement involved clearing arrangements in Germany.

Barter arrangements, and clearing and payment agreements were the inevitable product of the Great Depression. When a situation arises in which a country is denuded of its gold and foreign exchange, it must either become completely " autark " (self-sufficient) or find means of carrying on trade with other countries without the intervention of money. No country can become completely self-sufficient. It follows that if a country has no gold or foreign exchange, and is reluctant to allow its rate of foreign exchange to depreciate, its trade with individual countries must be so conducted that exports suffice to pay for imports and the debt services. Bilateralism can be so worked as to maintain a balance.

15. DIRECT STATE REGULATION OF TRADE

The primary object of exchange control was to check the flight of capital. But exchange control enables an individual country to pursue an independent policy of preventing depression or promoting recovery from depression. Suppose our currency tends to become over-valued owing to the operation of forces working in other countries. A gap in our balance of payments will arise. The gap may be closed by exchange rationing. Circumstances may be such as to make other remedies ineffective. " A country adopting such a policy may thus deliberately sacrifice some of the potential benefits of international division of labour in return for fuller employment at home, and it is quite possible that the immediate net effect on its real national income may be favourable."[15] The alternative is exchange depreciation.

In Germany exchange control served as an instrument of planning. A planned economy without exchange control is inconceivable. It is impssible to plan production while importers and exporters are free to import and export goods as they please. A planned economy must therefore vigorously control foreign trade, so that it subserves the objects of planning, the imports being restricted to essential articles required for consumption or production. In Russia the State enjoys the monopoly of foreign trade. In Germany this monopoly virtually belonged to the State. Exchange control permits monopolistic discrimination among different countries and different commodities according to the elasticities of demand or the requirements of planning. If no foreign exchange is allocated for imports from a particular country, or of certain commodities, these imports will not take place.

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[15] *International Currency Experience*, pp. 186

An International Equalisation Fund is helpful in adjusting discrepancies on account of trade and services including debt services. But no International Equalisation Fund could stem nervous flights of capital. To deal with such capital outflows, an International Equalisation Fund would have to be of a large size. In a time of panic in India, or elsewhere, a demand may arise for mass conversion of the national currency into, say, U.S. dollars. No Fund could undertake such conversion on an unlimited scale without endangering its own stability.

16. INTERVENTION AND RESTRICTION

Some writers discuss exchange management and control under two main heads, Intervention and Restriction. There is restriction when all foreign exchange transactions are centralised and no one is allowed to exchange the national currency for foreign currency without permission. Thorough-going exchange control is Restriction.

Intervention.—Intervention is temporary, but it may be for short or long periods.

For example, whenever there was a shortage of foreign bills in India tending to cause a weakening of exchange, the Government of India intervened. The sale of sterling by the Government added to the supply of sterling, thus lowering the market price of sterling. As the result of Government intervention, exchange generally improved. But it may be recalled that the sale of Reverse bills even on an unprecedented scale in 1920 failed to maintain the 2*s*. gold rate.

Intervention may take the form of "pegging;" the value of the currency may be "pegged" higher or lower than its market value. During the first world war the £ sterling was "pegged" up in terms of dollars. Pegging up facilitated the payment of U.S. debts by England and the purchases of goods in the United States during the war. When the "peg" was removed, sterling fell. In India the rupee was pegged down in terms of sterling. A keen demand for rupees in London had been created by war-purchases in India on behalf of the United Kingdom and her allies, and if the rupee had been left free, it would have risen sharply, for the heavy balance of trade in India's favour could not be met by the shipment of gold. When the "peg" was removed, exchange rose, and in February 1920, the market rate was nearly equal to 3 shillings sterling per rupee.

During the Great Depression Australia and New Zealand both allowed their £ to depreciate below the sterling level, as we have seen. The Australian "peg" was £125 Australian equal to £100 British; New Zealand's peg was £124 New Zealand equal to £100

British. Such pegging may also be called " Intervention," since there is no centralisation of all foreign exchange transactions and exchange rationing. The " peg " may continue in .operation from year to year.

What is the object of intervention in this form? If there is deliberate over-valuation of the currency, the object must be to reduce the cost of the debt services. If there is deliberate under-valuation, it is intended to stimulate exports. As we already know, under-valuation increases the bruden of foreign indebtedness, but the increase of national income resulting from the expansion of exports may more than compensate a country for the loss on account of the higher cost of the debt services.

Over-valuation may be inspired by the dread of inflation, but, as we have seen, devaluation and inflation are not identical, though in both cases there is a fall in the value of the national currency.

Over-valuation is a " most virulent malady." It may not only check the growth of exports but cause them to shrink. In theory, costs and prices become adjusted in time to any rate of exchange, however high its level. In fact, the process of adjustment is never smooth, and, at the end, it may leave the country impoverished, with recovery made difficult by the loss of foreign markets.

Crowther condemns under-valuation as " selfish " and " immoral." The nations are " members of one another."[16] So they are. But this dictum is conveniently forgotten when national interests are promoted by a national economic policy. An individual may live for others, but no nation has ever done so.

To Intervention Crowther gives " a clean bill of health."[17] It is not possible to quarrel with Intervention when its object is to avoid temporary fluctuations. Nor can we blame an agricultural country when it pegs its exchange down as a measure of self-protection against an unfavourable movement in the terms of trade. But competitive under-valuation only creates confusion, and if all currencies were equally under-pegged, there would be no change in the situation. The devaluation of the British pound to the same extent as the devaluation of the U. S. dollar would restore the original relation of the £ to the dollar, £1 =4.866 dollars.

Restriction.—It is the only satisfactory method of dealing with capital flight. We have seen that when panic seizes owners of capital, changes in discount rates will not influence capital movements. Again, unless all foreign exchange dealings were subjected to careful scrutiny, regulations intended to check a flight of capital would be evaded without much difficulty. " Stampedes of capital " must be drastically dealt with. Still, when Restriction is enforced, it should be confined, it is suggested, to capital transactions, and no attempt should be made to stifle the international movement of capital completely.

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[16] *An Outline of money*, p. 276.

[17] *Ibid.*, p. 307.

But Restriction may have wider objects—as in a planned economy. The condemnation of Restriction in such cases would be a condemnation of planning. Planning is an effective safeguard against booms and slumps in the outside world. A steady level of employment can be maintained in a planned economy, or cyclical fluctuations can be entirely eliminated. A steady level of employment promotes stability of incomes and a sense of economic security. These objects are so highly desirable in themselves, that the employment of exchange control to assist in their realization cannot be blameworthy.

The use of Restriction to avoid payment of foreign debts, or of blocked accounts to maintain different values of the national currency so that the foreigner is compelled to buy it dear and to sell it cheap, is indefensible.

17. STRUCTURAL CHANGES

Non-monetary factors profoundly influence monetary policies. An explanation of the Great Depression in monetary terms alone, as we have seen, would explain little or nothing.

In the inter-war period there was " a persistent trend towards national monetary management in the interest of internal economic stability."[18] The advantages of international division of labour were recognised; it was equally realised that the nations of the world were economically inter-dependent or, let us say, were " members of one another." But something had happened to disturb the international stability of which the old gold standard was the visible symbol. The first world war transformed the economic world and brought into play new forces which altered the structure of world economic society. In such circumstances currency policy had to be made to conform to domestic, social, and economic policy, and not the other way round. " What the world was groping for was the maximum degree of international stability consistent with freedom to pursue autonomous national policies to moderate the violence of economic fluctuations."[19]

The crisis of 1929-32 was due to structural changes, some of which we have already noted. The League Report, *International Currency Experience*, calls attention to the increasing decentralization of world's industrial activity, the restriction of international migration after the first world war, and " shifts of unprecedented magnitude in the structure of international debt," and discusses their relation to international exchange stability.

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[18] *International Currency Experience*, p. 191.

[19] *Ibid.*, p. 191.

18. INDUSTRIAL DECENTRALIZATION

"To an extent not always realized to-day, the international economic organisation of the nineteenth century was centred on and directed from England. The international gold standard was in effect a sterling standard. London was the commercial and financial heart of the whole system."[20]

After the first world war, the United States emerged as the greatest industrial power in the West, and Japan in the East, but industrial activity increased also in other countries, as may be judged from the following statement[21] :—

Increase in Industrial Production, 1929-38

U. S. S. R.	..	313%	Estonia	...	46%
Japan	...	75%	Sweden	...	46%
Latvia	...	75%	Chile	...	37%
Greece	...	65%	Denmark	...	36%
Finland	...	56%	New Zealand	...	35%
Eire	...	49%	Roumania	...	33%

The progress of industrialization in the less advanced countries altered the composition of exports of the more highly industrialized countries, as will appear from the following statement :—

Composition of Exports from the United Kingdom, Germany and the United States.

Percentages

		1880	1900	1913	1929
Capital goods	...	26	39	46	55
Consumption goods	...	74	61	54	45
		100	100	100	100

It will be seen that the proportion of capital goods increased from 26 per cent in 1880 to 55 per cent in 1929, while that of consumption goods fell from 74 per cent to 45 per cent during the same period. The industrialization of backward countries creates an increased demand for machinery, vehicles and durable consumers' goods produced in more advanced countries.

One may also consider the change in the composition of demand in industrial countries brought by a rise in the standard of living. There is a greater demand for luxury or semi-luxury goods (*e.g.* automobiles, refrigerators and radio sets) and such services as entertainment and travel.

Both for meeting the growing home demand and the export demand a greater flow of savings would be directed into the production of investment goods and durable consumers' goods. We know already that the production of such goods experiences wide fluctuations on account of the principle of acceleration. The whole system of production thus tends to become more and more unstable, and slight variations in demand at home and abroad cause violent fluctuations in output, prices and incomes.

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[20] *International Currency Experience*, p. 195.

[21] *Ibid.*, p. 196.

We have already noted the special difficulties of agricultural countries. It is not surprising that in their search for economic security and stability they have finally turned to industry. In the initial stages of industrialization there is no attempt to make machines or other durable goods ; attention is chiefly devoted to the production of simpler manufactures with imported capital equipment. Another large shift in demand will occur when the progress of heavy industry in the less advanced countries reduces their dependence on more advanced countries for the imports of durable goods of all kinds.

19. INTERNATIONAL BORROWING AND LENDING

We have already seen how the first world war transformed Germany, a creditor country, with a net import surplus, into a debtor nation, and the United States, a debtor country, into a great creditor nation. We have also seen how reckless lending may create a boom in the borrowing country, and the sudden cessation of lending precipitate a violent crisis.

The amount of foreign lending by the United States and England after 1930 was on a much reduced scale, and in certain years there were no capital issues at all on foreign account. The same is true of other lending countries, *e. g.*, France, Switzerland and the Netherlands.

The Bank of International Settlement wrote in its seventh Annual Report, 1936-37 :—

" A situation has now arisen in which the redemptions, repayments and repatriations of old foreign loans greatly exceed the amount of new issues on foreign account on the American, British and probably other lending markets. There have, indeed, been large capital movements for the purchase of bonds and shares on foreign markets, but this involves merely the acquisition of existing capital assets. Such transactions do not, unfortunately, give rise to a movement of commodities to the countries receiving the capital funds to the same extent as do new issues on foreign account, whether for public works or for industrial investment. The small volume of foreign issues is therefore one of the reasons for the depressed level of international trade."

The following statement shows capital issues on foreign account in the United Kingdom and the United States in certain years :—

Capital Issues on Foreign Account in the United Kingdom & the United States.

Year	United Kingdom (Statist.) Million £	United States (Million) $
1930	43.77	1,009.2
1931	7.92	253.7
1932	...	26.0
1933	7.10	0.1
1934	3.75	...
1935	6.73	...
1936	2.84	23.0
1937	6.69	3.3
1938	4.36	25.1

20. INTERNATIONAL MIGRATION

International migration was severely restricted after the first world war, and the restrictions had a special application to Asiatics. International restrictions on migration are a grim reality. They have made a myth of " the solidarity of the international proletariat," but here we are concerned with their relation to the international stability of exchange rates.

Assume that labour and capital are perfectly mobile not only within a country, but between different countries. Then a *laissez faire* regime may be workable. Indian agricultural workers, finding that they earned much less per head than workers in other countries, would migrate in a body to, let us say, Australia, bringing down the Australian but raising their own standard of living. Unrestricted international movements of labour and capital would reduce the existing inequalities in the national standards of living.

Given perfect freedom of migration everywhere, world commerce might be conducted with fixed and unalterable exchange rates based on gold. Adjustment would then be made to an over-valued currency through migration ! Suppose the 18*d.* rate is too high. We do not lower the gold value of the rupee, but enable workers in depressed trades and industries to settle in the countries which were prospering at our cost ! All this is utterly inconceivable, but the illustration is still useful in showing the pre-suppositions of the international gold standard and international exchange stability.

The steady growth of State intervention in economic matters, culminating in State Planning is easily understandable in view of the threat to national stability on account of the structural tendencies to instability. These tendencies have not ceased to operate, and they will continue in operation in the post-war world. Their effects can never be wholly neutralised but may be softened by international regulation of investment and commodity control.

21. THE INTERNATIONAL INVESTMENT BANK

The role of international investment in the development of backward regions has been noted. We have also seen that international loans, when they are used productively, benefit both the borrower and the lender. The borrowing countries may have potential agricultural and mineral resources which are lying neglected, or which cannot be fully exploited for lack of capital. The richer countries have surplus funds to invest. If, therefore, an international institution existed which centralised world's idle funds, and then redistributed them among countries which could usefully employ them, world's productive resources would increase, and standards of living might be helped to rise where they are at present unduly low.

The American Proposal.—The United States has proposed the establishment of a bank of international investment with an initial capital of 2000 million dollars, but which would ultimately reach a total of 10,000 million dollars or more. The capital of the bank is to be subscribed by member countries on the basis of a quota system. Each member country will subscribe the quota assigned to it partly in gold and partly in its national currency to begin with, but it will be expected to redeem the national currency part of the quota in gold at the rate of 2 per cent per annum. Ultimately, then, the whole capital of the bank will consist of gold. Where will this gold come from ? Evidently from the United States. *The Federal Reserve Bulletin* (November 1944) estimated that at the end of September, 1944, the world's total gold amounted to $35 billion, of which the United States held about $21 billion or 60 per cent. The principal holders of gold, other than the United States, are Latin America ($.2 billion) France ($2 billion), the United Kingdom ($1.7 billion, gold and dollars), Switzerland ($1.0 billion) and the U. S. S. R.

The proportion of the total world's gold held by the United States at the present time is higher still. It may be about 70 per cent.

Gold, as we have had occasion to note before, is very unequally distributed among the nations of the world—so unequally that if the capital of the Bank is held in gold, most of the gold would have, directly or indirectly, to be made available by the United States. Smaller gold quotas would undoubtedly be fixed for countries with little or no gold, but they would have still to borrow their gold quotas from the United States. When the proposal is put into effect, there will be a dispersal of U. S. gold on a large scale throughout the world.

The Bank's capital need not be limited to 10,000 million dollars, and it will not be so limited, for the Bank will be empowered to raise further capital by borrowing in the private investment markets of the world.

22. INVESTMENT PROJECTS

Having got together its initial capital, the Bank may start operations. Will its activities limit the scope for private investment ? This is not intended. Projects will be selected for investment which require vast sums, and therefore lie outside the sphere of private investment (railway building, irrigation, hydro-electric projects, etc.). Generally, projects requiring the expenditure of enormous sums are undertaken by Government, or a Govenment agency.

23. LOANS TO GOVERNMENTS

As a rule the Bank will lend money to governments or to government agencies only. International agencies may be set up for projects involving more than one country. Such projects may be on the lines of the famous T.V.A. ; T.V.A. lessons for international application have been discussed in a League publication bearing that title. (The construction of a tunnel under the English Channel, to connect England and France, would be an international project). The Bank may make loans to private bodies, but the loans must be guaranteed by the goverment or governments concerned. Private investors may be willing to lend to foreign governments or government agencies; the Bank will guarantee such loans. It is not intended that the Bank should encroach on the field of private enterprise or to discourage private investment of capital in foreign countries. Private investors would welcome a guarantee of their loans to the outside world by the Bank. Instead of a rival or a competitor they will find in the Bank an authoritative counsellor and protector of their interests.

24. CONDITIONS OF LOANS BY THE BANK

Before making a loan the Bank will investigate the soundness, from the commercial point of view, of the project for which it is required, and also take into consideration the budgetary position of the government concerned and the prospective balance of payments of the borrowing country. A country which is not able to balance its budget, year after year, could not be trusted to pay interest or instalments of the loan at due dates. Nor would a country with an adverse balance of payments, year after year, inspire confidence. But it may be hoped that if a project is commercially sound, the fulfilment of other conditions would not be rigorously insisted upon in all cases. It is precisely countries in difficulties which would need assistance. If, in every case, the Bank required the balancing of the budget as a condition of a loan, the government concerned might be forced to take measures which burden industry, and curtail government expenditure intended to create employment. Besides, the yearly balancing of the budget is not now regarded as tremendously important.

In the case of debtor countries, an adverse balance of payments, which persists year after year, is a dangerous sign. But here, again, such a country would stand in special need of assistance. It is conceivable that the development of productive resources by means of a big loan may, in time, correct the adverse balance. Of the greatest importance in international investment of capital is the soundness, or otherwise, of the project itself. If the project is good, and if there is a guarantee that the loan would not be mis-applied, and if the use that is actually made of it can be watched, and, if necessary, controlled, the other conditions do not matter.

25. GOLD AND GOODS

Borrowing countries do not want gold to develop their resources, but goods. We possess over 1,500 crore rupees worth of sterling securities. The sterling balances would be of use when we can turn them into machines, tools and implements.

The dispersal of American gold into the world would create an enormous demand for American capital goods. U.S.A. has already a heavy export surplus. The proposal to establish an international investment bank, with a capital ultimately of 10,000 million dollars or more, when it is put into effect, will enormously increase U.S.A. export surplus.

The feeling in other manufacturing countries is that the U.S. export surplus, instead of growing, should decrease, so that opportunities for the development of exports are created for other countries. This would imply that while the United States make a big loan, for example, to Germany, the loan should be made by exports of goods, not from, U.S.A. but from, *e.g* , the United Kingdom. That would suit the United Kingdom; whether it would suit the United States is another matter.

G.D.H. Cole says :—

"In other words, British and other European goods must be sent to the borrowing countries in payment of debts owing to the United States; and the ownership of the capital assets thus created must accrue to the United States Government or to private American citizens"[22]

Suppose the United States lends India the equivalent of 100 crores of rupees, which are invested in irrigation projects and hydro-electric works. Then the United States may hold Government of India bonds, or special bonds created to finance these enterprises, of an equal amount. But the capital goods required for the purpose may come from the United Kingdom, or the creditor may permit us to spend the loan in countries other than the United States. American gold may thus be used for creating employment in other countries.

The proposal would not please Americans. But is there any other way of bringing about world recovery? If the dispersal of American gold, through the proposed Bank, is only a device for further increasing U.S. export surplus, the proposal would arouse little interest or enthusiasm in other countries.

From the second world war U.S.A. has emerged as a far more powerful country than she did from the first world war. The first world war saw the transformation of the U.S.A. from a debtor into a creditor country. At present she is the financial dictator of the world. She owns international purchasing power in the form of her gold reserves far exceeding that owned by all other countries put together. She is industrially stronger than ever before—on account of her geographical position she entirely escaped the ravages of war—and she may use her increased productive power to add to her hoard of wealth. She did that in the years following the end of the first world war, by insisting on the repayment of war debts and other obligations, and shutting out imports of goods by high tariffs. The consequences of such a policy to other countries were disastrous. History will repeat itself, unless wiser counsels prevail.

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[22] *Money, Its Present and Future*, p. 281.

CHAPTER XII

THE INTERNATIONAL MONETARY FUND AND THE INTERNATIONAL TRADE ORGANIZATION

1. EARLIER AMERICAN PROPOSALS

In the U. S. proposal for a United and Associated Nations Stabilization Fund, the purposes of the Fund were thus defined :

1. To stabilize the foreign exchange rates of the currencies of the United Nations and nations associated with them.

2. To shorten the periods and lessen the degree of disequilibrium in the international balance of payments of member countries.

3. To help create conditions under which the smooth flow of foreign trade and of productive capital among the member countries will be fostered.

4. To facilitate the effective utilization of the abnormal foreign balances accumulating in some countries as a consequence of the war situation.

5. To reduce the use of foreign exchange controls that interfere with world trade and the international flow of productive capital.

6. To help eliminate bilateral exchange clearing arrangements, multiple currency devices, and discriminatory foreign exchange practices.

How are exchange rates to be stabilized ? The powers of the Fund included the power.

" To fix the rates at which it will buy and sell one member's currency for another, and the rates in local currencies at which it will buy and sell gold. The guiding principle in the fixing of such rates shall be stability in exchange relationships. Changes in these rates shall be considered only when essential to correction of a fundamental disequilibrium and be permitted only with the approval of four-fifths of member votes."

It will be noted that the Fund was to fix the gold value of national currencies, and that, after the rates of exchange had been fixed in relation to gold, they were practically unalterable.

The Fund imposed obligations upon member countries.

Each member country of the Fund was to undertake the following :—

1. To maintain by appropriate action exchange rates established by the Fund on the currencies of other countries, and not to alter exchange rates except with the consent of the Fund and only to the extent and in the direction approved by the Fund. Exchange rates of member countries were to be permitted to fluctuate within a specified range fixed by the Fund.

2. To abandon, as soon as conditions permitted, all restrictions and controls over foreign exchange transactions (other than those involving capital transfers) with other member countries, and not to impose any additional restrictions without the approval of the Fund.

3. To co-operate effectively with other member countries when such countries, with the approval of the Fund, adopted or continued controls for the purpose of regulating international movements of capital.

4. Not to enter upon any new bilateral foreign exchange clearing arrangements, nor engage in multiple currency practices, except with the approval of the Fund.

5. To give consideration to the views of the Fund on any existing or proposed monetary or economic policy calculated to cause a serious disequilibrium in the balance of payments of other countries.

2. BRITISH VIEW

Happily for other countries, the Fund did not materialise in the form conceived by U. S. experts. Still it is interesting to know the kind of post-war world that was envisaged by American financiers and businessmen. It was a world of stable, practically unalterable exchange rates, fixed in terms of gold, fluctuating, as before 1914, within narrow limits; a world without exchange intervention, management and control; a world with the minimum of restrictions on the movement of goods, and without any quantitative controls, discrimination, preferences, or bilateralism.

American plans of world reconstruction did not suit Britain. The British point of view had earlier found expression in a report by the Federation of British industries, representing the views of 182 Trade Associations, which are constituent bodies of the Federation. The Federation in their report recapitulated Britain's economic position. Here was a country heavily dependent on the outside world for food, raw materials and many other products. She paid for these by exports of commodities and of capital, by interest on her past foreign investments, and by the services of her sailors. The war had turned her, an old creditor, into a debtor country.

"In such circumstances the view is widely held in industrial circles in the country," says the Report by the Federation of British Industries (1942), "that we must, at any rate for some considerable period, rely upon a policy of directive imports, on the assumption that we only import from overseas countries those essential commodities for which such overseas countries are prepared to accept payment by the only means which will be open to us—*i.e.*, by the export of our own products and such services as we can render. In effect, almost a system of barter or, at any rate, a system of bilateral trade which will regulate our imports by our capacity to pay for them. This involves import and export controls, possibly by quota, preferential treatment of the imports of those countries which are prepared to assure us of the means of paying for them, and exchange control. Otherwise our economic stability crashes, owing to our importing beyond our ability to pay, which is the road to national bankruptcy."

The Federation noted the American longing for a post-war world without exchange and other controls with apprehension. Responsible American opinion seemed to envisage a post-war world in which " trade-barriers, exchange controls, directive systems of imports and exports, discriminatory agreements to facilitate trade between individual countries should be swept away. Trade should everywhere be free, upon the basis of the unrestricted M. F. N. clause. Inter-Imperial preferences, with all the advantages they have brought to Empire trade, should be given up. In other words, every country should be free to export to whatever destination it wishes, and to any extent, and should be prepared to receive any imports sent to it, irrespective of how the balance of account can be met. But for this country this problem of financing our imports, so necessary for a small highly industrialised country such as the United Kingdom, is not a matter of economic theory but one of economic life or death."

The British and American points of view were totally irreconcilable. And yet a reconciliation had to be attempted. The United States moderated her enthusiasm for a world entirely free of restrictions. Britain wanted a big U. S. loan and was compelled to meet the United States half way. There is little reason to doubt that without the bait of the loan, Britain would not have blessed the International Monetary Fund.

3. THE INTERNATIONAL MONETARY FUND

Reference has been made above to the United States proposal for a United and Associated Nations Stabilization Fund, and the British proposals for an International Clearing Union. The International Monetary Fund, which has materialised and which India has joined as an original member, differs in certain important respects from the earlier American and British proposals. We may note these differences.

The Fund is primarily meant for currency stabilization. The International Clearing Union of the British currency plan had also other objects in view. The Union, it was stated, might become ' the pivot of the future economic government of the world.' The additional purposes of high importance which the Union might have been able to serve, were the following :

(1) post-war relief, rehabilitation and reconstruction, (2) preserving international order, (3) Commodity Control (4) regulation of international investment (5) maintaining stable prices and controlling the Trade Cycle. The International Monetary Fund is not concerned with these grandiose projects.

2. Both the *Bancor* and the *Unitas* of the earlier plans have vanished. The Fund is not too provide a generally acceptable means

of payment between nations, in the form of an international monetary unit, to which the currencies of different countries may be linked.

3. In the earlier plans exchange rates could not be altered by unilateral action. According to the regulations of the Fund the rate of exchange prevalent in November, 1945, is to be taken as the initial par value. But any country may, within a specified period, subsequently notify the Fund that this par value is unsatisfactory and choose another initial par value. A maximum change in the par value up to 10 per cent in either direction will be accepted by the Fund ; variation to the extent of another 10 per cent will be dependent on the sanction of the Fund, which will, presumably, be given. Changes from the par value exceeding 20 per cent will not be possible.

The Fund, therefore, does not start with exchange rates fixed unalterably in relation to gold. It is recognised that the initial rates may have to be altered, and unilateral action is permitted in altering the rates up to 10 per cent of the initial par value. But at the end of the period of transition, during which exchange rates may be changed, there will be exchange stability. The ultimate object is to be avoid competitive currency depreciation. The Fund will not object to revaluation of a currency to remove a fundamental disequilibrium of a long-term nature, but a short-term disequilibrium will not be permitted to be adjusted through exchange rates.

It seems that a return, eventually, to a gold standard is contemplated, but the provisions of the Fund in regard to exchange rates are not rigid but elastic.

4. There is a definite recognition of exchange control in the transitional period. A member country, wishing to retain measures of exchange control inconsistent with the objects of the Fund three years after the Fund has come into force, shall consult the Fund about their retention. In special cases the permission may be given. The earlier proposals did not approve of exchange control under any circumstances. Elasticity, rather than rigidity, characterizes the provisions of the Fund.

5. The Fund has been organised on a voluntary basis, and any member country may withdraw from the Fund without penalty.

Each member country has been assigned a quota of the total endowment of the Fund amounting to 10,000 million dollars. One quarter of each country's quota, or one-tenth of the country's ascertained holdings of gold and dollars together, whichever is less, is to be payable to the Fund in gold, and rest in the country's own currency. Thus the Fund will begin operation with a stock of gold and of the currency of each country. Member countries may draw upon the Fund up to a prescribed amount, paying a charge which will vary with the amount borrowed and the period for which it is borrowed. The creditor countries not drawing on the Fund will receive a bonus. These transactions are not loans in the proper sense, but conversion of one currency into another.

It may be expected that there will be a great demand for U. S. dollars. Suppose the demand exceeds the supply. The provisions of the Fund regarding the apportionment of scarce currencies are framed as follows :

" 1. When it becomes evident to the Fund that the demand for a member country's currency may soon exhaust the Fund's holdings of that currency, the Fund shall so inform member countries and propose an equitable method of apportioning the scarce currency. When a currency is thus declared scarce, the Fund shall issue a report embodying the causes of the scarcity and containing recommendations designed to bring it to an end.

" 2. A decision by the Fund to apportion a scarce currency shall operate as an authorization to a member country, after consultation with the Fund, temporarily to restrict the freedom of exchange operations in the affected currency, and, in determining the manner of restricting the demand and rationing the limited supply amongst its nationals, the member country shall have complete jurisdiction."

Exchange control by a country to restrict the demand of its nationals for a scarce currency is explicitly allowed. Member countries are also left free to deal with movements of capital. The Fund is not to be used for financing the movements of capital. Its object is to assist payment for imports of goods and services, and to remove disequilibrium arising in the course of such payments only. A ' flight of capital ' may be checked by measures of exchange control.

Three of the objectives of the Fund are thus expressed :

" (*ii*) To facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy.

(*iii*) To promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation.

(*iv*) To assist in the establishment of a multilateral system of payments in respect of current transactions between members and in the elimination of foreign exchange restrictions which hamper the growth of world trade."

The Fund stands for freer trade and exchange stability. These are the chief pillars of the international gold standard. But the new international gold standard, as we have seen, is a flexible standard.

4. THE ANGLO-AMERICAN LOAN AGREEMENT, 1946

Britain has joined the International Monetary Fund.

Britain's position was one of real difficulty. In 1930 imports into Britain (excluding re-exports) were valued at £958 millions, or

£20-17 per head of the population, which may be contrasted with import of foreign merchandise into India in 1929-30 of about 11 annas per head. In the year 1929 the excess of imports into the United Kingdom of merchandise and bullion over exports was estimated at £366 millions. Britain's invisible exports in that year amounted to £504 millions, which left her with a credit balance of 138 millions. This was the position in 1929—a comfortable position. Now consider the British balance of payments during the three years before the outbreak of the second world-war, 1936-38.

Balance of payments of the United Kingdom, 1936-38.—(The figures are the average of the three years, in million pounds) :—

Debit		Credit	
Imports	930	Exports	540
Government payments	10	Investment Income	200
		Shipping Income	110
		Commissions etc	40
		Other Receipts	10
	940		900

Deficit 40 millions.

A credit balance of £138 millions in 1929 was converted into an annual average deficit of 40 millions in 1936-38.

Britain's economic position worsened as the result of the war on account of (*a*) the loss of a considerable proportion of "investment income," and (*b*) the great accumulation of obligations represented by the sterling balances. The Anglo-American loan agreement must be veiwed in the light of these facts.

The purpose of the loan, amounting to $3,750 millions, is to "facilitate purchasing by the United Kingdom of goods and services in the United States, to assist the United Kingdom to meet transitional post-war deficits with the current balance of payments; to help the United Kingdom to maintain adequate reserves of gold and dollars, and to assist the Government of the United Kingdom to assume the obligations of multilateral trade in this and other agreements."

That Britain could not undertake the obligations which the membership of the International Monetary Fund would impose on her, without the assistance of the U. S. loan, may be judged from the following statement in P. E. P. No. 247 for march 29, 1946 :

" If for any reason we do dot receive the U. S. loan, an acute shortage of dollars will compel us to renounce a system of universal multi-lateral trade, cut adrift from Bretton Woods and the programme of the I. T. O. (International Trade Organisation), and instead, seek the less ambitious objective of a wide area of multilateral trade in which sterling is freely accepted as a means of payment. In practice this would mean strengthening the sterling area and extending the existing arrangement of payments or Monetary Agreements with countries which could not suitably join it. The framework of such a system already exists ".

5. STERLING AREA EXCHANGE ARRANGEMENTS

Sterling area exchange arrangements have been discussed before. The terms of the U. S. loan provide for the virtual extinction of these arrangements. Not later than one year after the effective date of the Loan Agreement, the sterling receipts from current transactions of all sterling area countries will be made freely available for current transactions in any currency area without discrimination, with the result that each member of the Sterling Area will have its current sterling and dollar receipts at its free disposition for current transactions anywhere.

6. ACCUMULATED STERLING BALANCES

In regard to the accumulated sterling balances, the United Kingdom will make settlements with the Sterling Area countries, on the basis of dividing these balances into three categories, (*a*) balances to be released at once and convertible into any currency for current transactions; (*b*) balances to be similarly released by instalments over a period of years beginning in 1951, and (*c*) balances to be adjusted as a contribution to the settlement of war and post-war indebtedness. The last category signifies cancellation of a part of the sterling balances, probably one-third of the total. The part of the balances which will be released at once might be converted, at the will of the holder, into any currency for making purchases in any part of the world one year from the settlement of the agreement date.

7. IMPORT ARRANGEMENTS

If either the Government of the United States or the Parliament of the United Kingdom imposes or maintains quantitative import restrictions, such restrictions shall be administered on the basis of non-discrimination against imports from the other country, except in specified cases.

Of the total loan granted, $650 millions is for the settlement of lease-lend goods. The loan is repayable at 2 per cent interest over a period of 50 years beginning December 31, 1951. The payment of interest in any particular year would be waived if the total exports, visible and invisible, fall below a figure necessary to buy the volume of British imports in 1936-38.

In announcing the terms of the Loan in the House of Commons on 7th December, 1945, the British Prime Minister said that the two countries had agreed to begin negotiations between themselves and other countries in regard to tariffs, preferences, quantitative restrictions, State-trading cartels and other types of trade barriers. He added that there would be no uni-lateral surrender of preferences. The existing system of preferences within the British Commonwealth and Empire will be restricted " provided there is adequate compensation in the form of improvement in trading conditions between the Commonwealth and Empire countries and the rest of the world."

There was Conservative opposition to the Loan on three grounds. (1) It was thought that the Loan " involved a return to the international gold standard," which was considered inimical to British trade and prosperity, (2) it involved the abolution of the sterling area, thus " threatening the economic stability of Britain and the Empire," and (3) it involved the principle of non-discrimination which " may disrupt the unity the British Empire." But Britain could not get along without the Loan, and she accepted it on the terms offered. The Loan had been negotiated by the late Lord Keynes who vigorously defended it in the House of Lords.

8. INTERNATIONAL TRADE ORGANISATION

An international organisation to control and direct the world's financial mechanism has been created in the form of the International Monetary Fund. The financial cart is ready. What remains is to put the horse of work and trade between the shafts. An International Trade Organisation is an essential counterpart of the International Monetary Fund, and we therefore proceed to consider the American proposals regarding the creation of an international Trade Organisation.

No world monetary mechanism can work satisfactorily unless trading conditions are satisfactory. With the help of the I. M. F. (International Monetary Fund), temporary disequilibria in a country's balance of payments may be removed. But there may be fundamental causes of disequilibrium in operation, which may produce chronic instability and depression, leading to a fundamental derangement of a country's economy and flight of capital. The International Monetary Fund cannot deal with deep-seated maladies of national economies. They have their roots in work and trade, and must be the concern of a special organisation, the I. T. O.

Full Employment.—The ideals of the proposed I. T. O. are unexceptionable, but the co-ordination of national methods and policies needed for their realisation will present almost insuperable difficulties.

The proposals lay emphasis on high and stable levels of employment. It is stated that :

" The attainment of approximately full employment by the major industrial and trading nations, and its maintenance on a reasonably assured basis, are essential to the expansion of international trade on which the full prosperity of these and other nations depends."

The Final Act of the Bretton Woods Conference referred to the expansion and balanced growth of international trade which was expected to promote and maintain high levels of employment. In the passage quoted above there is a recognition of the fact that international trade cannot grow and prosper without full employment in the major industrial and trading nations. Depressed conditions in these countries react on the less-advanced countries, reducing the demand for agricultural products which, in turn, reacts on the prosperity of the major industrial countries.

The United Nations are to undertake that:

1. Each of the signatory nations will take action designed to achieve and maintain full employment within its own jurisdiction, through measures appropriate to its political and economic institutions.

2. No nation will seek to maintain employment through measures which are likely to create unemployment in other countries or which are incompatible with international undertakings designed to promote an expanding volume of international trade and investment in accordance with comparative efficiencies of production.

3. Signatory nations will make arrangements, both individually and collaboratively, under the general sponsorship of the Economic and Social Council of the United Nations Organisation, for the collection, analysis and exchange of information on employment problems, trends and policies.

4. Signatory nations will, under the general sponsorship of the Economic and Social Council, consult regularly on employment problems and hold special conferences in case of threat of widespread unemployment."

Nothing but good can result from the exchange of information between countries on employment problems, trends and policies, and regular consultations in special conferences when there is a threat of widespread unemployment anywhere. But trouble will arise when economic measures devised to promote full employment in one country react unfavourably on other countries. We are told that such national measures must not obstruct an expanding volume of international trade and investment " in accordance with comparative efficiences of production." How are " comparative efficiencies of production " to be interpreted, and who is to interpret them? Very probably the idea is that the relative positions of the leading countries in trade and industry should remain unchanged. But this is impossible. India at present is a heavy importer of capital equipment, but if planned industrialization were undertaken in our country on a nation-wide basis, within a generation India may be in a position to produce all the capital goods she requires for maintaining the supply of consumers' goods at a satisfactory level. The rapid industrialization of India, with her population of 400 millions, must restrict the opportunities for trade expansion in certain directions in the case of the most highly industrialized countries.

Industrialization of less advanced countries, when it is proceeding slowly and normally, does not restrict the exports of the older industrial countries. But the character of their exports changes, exports of machinery and apparatus increasing in importance. The older industrial countries are differently affected; while many of them gain, some may lose. They have to adapt their economies to the changed conditions, and adaptation cannot be completed without friction and some loss somewhere. Rapid industrialization of backward countries must increase the causes of friction and augment the losses. The League Report entitled *Industrialization and Foreign Trade* says:

> "In fact, wherever export and industries become unprofitable on account of the shifts in demand that result from industrialization in the importing countries, some loss will be suffered even though there may be net gain, and such loss will not be confined to countries with falling exports. Any rapid industrialization, therefore, even when it does not lead to a decline in trade, is likely to cause friction and to have certain unfavourable effects on the economy of older industrial countries."[1]

Even when industrialization is not taking place with the assistance of quantitive controls, there is a short-circuiting of foreign trade. The growth of the Indian Cotton Textile industry may reduce our export surplus of raw cotton. The cotton mill industry has reached a stage of development which has rendered the imports of cotton piece-goods unnecessary; its scope for expansion is almost unlimited, considering the present low level of per capita consumption of cloth in the country. It is easily conceivable that the entire supply of home-grown cotton may be absorbed by the home industry. On the one hand imports of cotton manufactures cease, and on the other, exports of raw cotton disappear. Foreign trade is thus short-circuited. If heavy industry is at the same time not neglected, the growth of capital imports may become insignificant at the end of 25 or 30 years.

It should not also be forgotten that industrialization in countries like India has been undertaken for compelling reasons: (1) To reduce the country's excessive dependence on agriculture, (2) to find more profitable employment for capital and labour, and (3) as a safeguard against depression such as that of 1929-32, which brought agricultural countries to the verge of ruin. The economy of a country whose main reliance is on agriculture is necessarily unstable. Secondly, as a source of income, agriculture is intrinsically inferior to industry. Thirdly, there is no guarantee that our terrible experience of 1929-32 may not be repeated. Industrialization is thus due to causes of permanent significance. Backward countries, in their attempt to create conditions of "full employment" for their own nationals, will not be deflected from their course to promote the growth of international trade and investment "in accordance with comparative efficiencies of production."

9. IMPORT RESTRICTIONS

The proposals regarding an International Trade Organisation envisage a broad and yet detailed trade agreement, among many nations, dealing at one time with many different sorts of government restrictions on trade. All restrictions are not to be abolished straight away, but moderated; principles are to be formulated within which the restrictions allowed would be administered. These restrictions, as we already know, take the most varied forms, ranging from the tariff to quotas, import licences and exchange allocation. It is proposed that " member countries should enter into arrangements for the substantial reduction of tariffs and for the elimination of tariff preferences, action for the elimination of tariff preferences being taken in conjunction with adequate measures for the substantial reduction of barriers to world trade." Members will undertake " not to maintain any quotas, embargoes or other quantitative restrictions on their export or import trade with other members." Subsidies are not ruled out. Subsidies for home production are permitted. Export subsidies are prohibited, but only at the end of three years ; and even at the end of that period they would be permitted in special cases when there is a surplus of a commodity. Subsidies suit the United States, for the Government of that country is rich enough to bear their cost.

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[1] Pp. 78—9.

The proposals also deal with the restrictive practices of combinations, cartels and other monopolies When a private agreement divides the markets of the world among the members of a cartel, the movement of goods between the zones is effectively prevented. A special agency will be set up within the I.T.O. to receive complaints, examine the facts, and offer advice where combinations and cartels are concerned.

State trading, as by the U.S.S.R. has also not been forgotten. As the counterpart of tariff reductions, countries having a complete State monopoly of foreign trade shall " undertake to purchase annually from members . . . . . . products valued at not less than an aggregate amount to be agreed upon " on a non-discriminatory basis.

Exchange restrictions are covered by the Bretton Woods Agreement, and members of the I.T.O. must also be members of the International Monetary Fund.

The production of and trade in primary products will be regulated. Provision is to be made for inter-governmental commodity agreements, to deal with surpluses and concentrated unemployment. It would be interesting to know how the I.T.O, would help us to find work for millions of under-employed workers in agriculture. In agricultural countries there is no concentrated unemployment, but permanent under-employment.

The I.T.O. will have general supervision and control in all trade matters. It will also collect, analyse and publish information relating to the whole field of world trade. Its principal organs will be a conference of all members once a year ; an Executive Board, consisting of 18 member countries, with the leading countries as permanent members; a commercial policy commission, a commission on business practices, a commodity commission and a secretariat. When this organisation has been brought into being, and begins to function, the control of world trade will be virtually exercised by a few leading countries. But the I.T.O. will find the greatest difficulty in harmonising the conflicting claims, policies and demands of member countries.

PART III. BANKING

CHAPTER XIII

THE BANK OF ENGLAND

In 1694 the Government of William and Mary in England was engaged in a war with Louis XIV and was badly in need of money. William Paterson, a Scotch adventurer, proposed to Parliament that a loan should be offered for public subscription, and that to make the offer attractive, certain banking privileges should be conferred on the subscribers. The proposal was accepted, and the Act of 1694 provided for the incorporation of the subscribers to a loan to the Government of £1,200,000 bearing interest at 8 per cent, as the Governor and Company of the Bank of England.

There was some opposition to the Bank from goldsmiths who talked of the risk of honest merchants " if they got into the clutches of this harpy of Grocers' Hall."[1] Others thought that the Bank would grow too powerful " and would become the keystone of the commecial world "[2]—a prophecy which came true.

The charter of the Bank was renewed in 1696. Bank's capital was doubled; the rate of interest was reduced to 6 per cent, the issue of notes payable to bearer on demand was authorised, thus laying the foundation for a true bank-note circulation, and it was provided that no other bank or corporation in the nature of a bank should be allowed in the kingdom. The monopoly of " banking " (which was then understood to mean the right of note-issue) was confirmed by the Act of 1707 and defined by the Act of 1742 as " exclusive banking ". The Act of 1742 a declared that

> " No other Bank shall be erectd, established, or allowed by Parliament, and that it shall not be lawful for any Body Politick or Corporate whatsoever, erected or to be erected, or for any other Persons whatsoever, united or to be united, in Covenants or Partnership, exceeding the number of six Persons, in that Part of Great Britain called England, to borrow, owe, or take up, any Sum or Sums of Money on their Bills or Notes, payable at Demand, or at any less Time than six Months from the borrowing thereof, during the Continuance of such said Privilege to the said Governor and Company."

The exclusive privilege of note-issue conferred on the Bank did not prevent the issue of notes by partnerships of six partners or less, nor the performance of the other banking functions by companies or partnerships of a greater number of partners.

There was a run on the Bank in the panic of 1707, which was partly due to the fear of a French invasion. Private bankers tried to ruin their rival, but the Bank had also its friends. It is stated that one individual, whose total wealth amounted to £500, gave this sum to the Bank. The Bank made a call of 20 per cent on its shareholders and finally the danger was overcome.

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[1] Andreades, *History of the Bank of England*, p. 68.

[2] *Ibid.*, p. 69.

Commercial crises occurred in 1763, 1772 and 1783, of which we may notice the last. The war with the United States ended with the recognition of American independence in 1782, and international trade, which had suffered heavily from the war, began to develop very rapidly. The increase in business, due to the opening up of new markets, led to a considerable over-issue of notes, and a serious drain of specie began from England. It did not escape the attention of the Directors of the Bank that when they restricted the issue of notes, even for a short time, the drain was checked, and thus, as early as 1783, they formulated the following principle for their guidance: "That while a drain of specie is going on these issues should be contracted as much as possible, but that as soon as the tide had given signs of ceasing, and turning the other way, it was then safe to extend these issues freely[3]".

The same principle today guides the credit policy of central banks all over the world. A restriction of credit is deliberately brought about in order to check a drain of gold and to raise the external value of the currency.

1. SUSPENSION OF SPECIE PAYMENTS IN 1797

The Bank stopped its cash payments on February 12, 1797, and did not resume them till 1821. This period in the Bank's history is known as the period of Bank Restriction.

What led to the suspension of specie-payments? Economic conditions in the country during 1794 and part of 1795 were unfavourable, but probably the worst would not have happened but for the financial policy of the "Heaven-born Minister," William Pitt.

Britain was involved in a war with France, and she paid heavy subsidies to her Continental Allies. A clause had been introduced in the charter granted to the bank in 1694 prohibiting the bank from lending money to the Government without the express authority of Parliament. Pitt disregarded this prohibition. Large amounts of gold coin and bullion were exported to the Continent, for example, over £8 millions in 1794. The Bank might have met the situation by restricting the note-issue, but Pittt's growing demands made that impossible. The total circulation of notes increased from £10 millions in August, 1794, to £14 millions in February, 1795. The Bank's gold reserve began to decline, and the exchange fell.

The suspension of specie payments gave England an inconvertible paper currency. The over-issue of notes gave rise to phenomena which aroused a keen debate.

2. THE BULLION REPORT

There was no question about the facts: (1) The market price of gold per fine ounce, £4-10, had risen above the Mint price, £3-17-6d; (2) foreign exchange had fallen below par and (3) while the note-issue was increasing, specie had disappeared from circulation.

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[3] *Ibid.*, p. 158.

The debatable questions were :

1. Had the paper money depreciated, or was it gold which had appreciated ?

2. Was the fall in the rate of the exchanges due to the over-issue of notes ?

3. Would the restriction of note-issues lower the price of gold and improve the rate of the exchanges ?

4. What was the right method of regulating the note-issues ?

When notes depreciate, the premium on gold is only a measure of this depreciation. But a well known merchant, Mr. Chambers, had such unbounded faith in the Bank of England notes that, in his evidence before the Bullion Committee, he said: "I do not conceive gold to be a fairer standard for Bank of England notes than indigo or broad cloth."[4]

The Bullion committee had no difficulty in showing that over-issue was the cause of the premium on gold and the fall in the rate of the exchanges below specie point. It followed that restriction of note-issues would remove the premium, and bring the exchanges back to par.

Curiously enough the authorities of the Bank upheld the doctrine that over-issue was impossible so long as notes were issued in discounting good bills at a high rate. It followed that the price of bullion and the state of the foreign exchanges were of no account in determining the volume of the note-issue. Mr. Pearse, the Governor of the Bank stated before the Bullion Committee in 1810 :

"In considering this subject, with reference to the manner in which bank notes are issued, resulting from the applications made for discounts to supply the necessary want of bank notes, by which their issue in amount is so controlled that it can never amount to an excess, I cannot see how the amount of bank notes issued can operate upon the price of bullion, or the state of the exchanges ; and therefore I am individually of opinion that the price of bullion or the state of the exchanges, can never be a reason for lessening the amount of bank notes to be issued, always understanding the control which I have already described.

'Is the Governor of the bank of the same opinion which has now been expressed by the Deputy-Governor ?

'Mr. Whitemore—I am so much of the same opinion, that I never think it necessary to advert to the price of gold, or the state of the exchange, on the days on which we make our advances.'

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[4] *Ibid.*, p. 223.

"Do you advert to these two circumstances with a view to regulate the general amount of your advances?—I do not advert to it with a view to our general advances, conceiving it not to bear upon the question.' "

And Mr. Harman, another Bank director, expressed his opinion in these terms :—' I must very materially alter my opinions before I can suppose that the exchanges will be influenced by any modifications of our paper currency.'

Well may Bagehot say that these answers " have become almost classical by their nonsense."[5]

The Bullion committee pointed out the fallacy of such reasoning. When an advance was made by notes paid in discounting a bill, so much purchasing power was placed in the hands of the merchant concerned, who would use it for making payments on his own accord. The notes thus fell " into the channel of circulation as so much circulating medium," and formed an addition to the mass of currency. " The necessary effect of every such addition to the mass is to diminish the relative value of any given portion of that mass in exchange for commodities." The notes, being inconvertible, could not return to the Bank. The quantity of notes in circulation was no test of over-issue, for the different commericial conditions required different quantities of notes. The real tests were the price of bullion and the state of the foreign exchanges.

The Restriction Act was repeated in 1819. The Act fixed May 1st, 1823, as the latest date for the assumption of cash payments, but actually cash payments were resumed on May 1st, 1821. The price of gold bullion was fixed at £3-17-10½*d*, and the trade in bullion and coin was declared free.

3. ESTABLISHMENT OF JOINT-STOCK BANKS IN LONDON

The Act of 1742 had given the Bank the monopoly of note-issue in " that part of Great Britain called England," the exception being banks formed by six or less than six persons. The monopoly was limited to borrowing or owing money on notes payable at sight, which was the meaning of banking in those days. The use of cheques was not legally forbidden, and a Mr. Joplin pointed out that the establishment of banks of deposit and their transactions were absolutely legal. The Act of 1833 affirmed the legality of joint-stock banks which issued cheques. Earlier in 1826, an Act had been passed, authorising the foundation of joint-stock banks, enjoying the right of issuing notes outside a limit of 65 miles from London.

The London and Westminster Bank was established in 1834 and many banks of issue began to function outside the 65-mile limit; however, their notes were not legal tender. The Bank of England notes were made legal tender in 1833. In the same year the Bank was exempted from the usury laws and permitted to raise its rate of discount above the legal maximum, 5 per cent,

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[5] *Lombard Street*, p. 177·

4. THE BANKING PRINCIPLE AND THE CURRENCY PRINCIPLE

The passing of the Act of 1833 was following by a great extension of credit facilities. Many new banks were founded in the expectation of making large profits. These expectations were not realised, and as many as 29 institutions failed between 1839 and 1843.

Was competition in note-issue desirable ? Two schools of thought arose. The advocates of the Banking Principle were opposed to any measures which had for their object the restriction of the quantity of paper money issued. But they insisted that the quality of notes should be guaranteed, that is to say, the notes must remain convertible. So long as they were convertible, there could be no over-issue, as the excess would return to the bank of issue. Notes could only be issued in discounting or making advances on securities, or in satisfying the legitimate demands of trade. They could not be forced into circulation.

But danger lies precisely in the convertibility of notes. Suppose the note circulation amounts to £20,000,000 with a gold reserve of £10,000,000. Additional notes of £5,000,000 are issued, which are in excess of the needs of trade, and which, therefore, return to the bank of issue. The circulation remains £20,000,000 as before, but the gold reserve is reduced to £5,000,000. If the excess issue amounted to £10,000,000 its return to the bank would mean the total disappearance of the gold reserve, and the consequent inconvertibility of the notes.

5. THE CURRENCY PRINCIPLE

The advocates of the Currency Principle laid stress on the obligation of the central bank to maintain an adequate reserve for meeting foreign indebtedness.

Lord Overstone repeatedly asserted that of the total stock of gold in the world, each country got a share to which it was entitled in virtue of its trade and commerce. Assume that the currency of the country consists wholly of gold. Then a scarcity of media of payment will bring about a fall of prices, which would attract gold from other countries. Abundance of money, by raising prices, and affecting the balance of payments unfavourably, would lead to an export of gold. Thus. gold movements would take place automatically.

The position materially changes when part of metallic circulation is replaced by paper money. All gold in circulation might disappear without bringing down prices, if it were replaced by an equal amount of paper money. The Currency Principle required banks to reduce their issues in proportion to the gold exported—in other words, a circulation consisting parly of gold and partly of paper must be made to behave as if it were entirely of gold.

The Currency Principle suffered from two serious defects. In times of panic it is the central bank's duty to assist the public, and paper money might well take the place of gold. If additional paper money cannot be issued except against gold, the need for cash cannot be met, and the result might be wholesale liquidation of perfectly sound business enterprises.

Secondly, bank deposits may serve as substitutes for specie, like notes. The restriction of notes, when there is no restriction on the creation of cheques, will not make a circulation behave as if it were a gold circulation. Suppose a considerable amount of gold has been exported. The place of this gold might as well be taken by deposits in circulation as by notes in circulation. " Let the needful stock of media of payment, " said Mr. Pierson, an able Dutch economist, " be represented by figure 100, and suppose it to be made up of specie and bank deposits each to the extent of 50. If specie be now exported to the value of 10, but the banks at the same time grant credits to their depositors to the same amount, how is the fall in prices to take place ? "[6]

The advocates of the Currency Principle made four demands :

1. Paper circulation should be regulated according to the fluctuations it would have undergone, had it been gold.

2. The Bank of England should be divided into two departments, an Issue Department and a Banking Department.

3. The Bank should buy gold at a fixed price.

4. The Bank should have the monopoly of issue, thus ending competition in the issue of notes.

Sir Robert Peel, who was responsible for the passing of the Bank Charter Act of 1844, thus defended the rejection of the doctrine of free competition in the matter of note-issue.

" We should infer certainly, from reasoning, that free competition in the supply of any given article will probably ensure us the most abundant supply of that article at the cheapest rate. But we do not want an abundant supply of cheap promissory paper. We want only . . . just such a quantity of paper . . . as shall be equivalent in point of value to coin which it represents . . . That system, therefore, which provides a constant supply of paper equal in value to coin, and so varying in amount as to ensure at all times immediate convertibility into a coin, together with perfect confidence in the solvency of the issuers of paper, is the system which ought to be preferred."

Quality was more important than abundance or cheapness :— " Unless the issuers of paper conform to certain Principles, unless they vigilantly observe the causes which influence the influx or efflux of coin, and regulate their issues of paper accordingly, there is danger that the value of the paper will not correspond with the value of the coin."

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[6] *Ibid.*, pp. 275-76.

The basic idea was to make the Bank note equal to a gold coin of corresponding value, and in this the Bank Charter Act was completely successful. But the system of note-issue became rigid and inelastic—" a strait waistcoat."

English trade and industry were developing rapidly in the latter half of the 19th century, and more and more money was required by the commercial community. " If the apparent intentions of the Act of 1844 had been carried out," says Hartley Withers in his classic, *Meaning of Money*, " the subsequent enormous development of English trade, if it had been possible at all, must have been accompanied by the heaping up of a vast mass of gold in the Bank's vaults."[7] The commercial community evaded the intentions of the Bank Act by developing the use of cheques.

There is a difference between a cheque and a bank note. A bank note is intended to circulate, or to pass from hand to hand. A cheque is meant to effect a single payment, though, by endorsement, the same cheque may be used to make more than one payment. The advantage of a cheque circulation is that its amount is not restricted by law, but by the good sense of bankers and their clients.

6. THE BANK ACT OF 1844.

The Bank of England was divided into two Departments, independent of each other. The Issue Department was permitted to issue notes against securities to the amount of £14 millions, but beyond this sum it could not issue a single note except against coin or bullion.

The Act contained provisions preventing any increase of the note-issue of joint-stock and private banks beyond the average at which they stood during 12 weeks preceding April 27, 1844. No bank then not engaged in the issue of notes was allowed to issue them, and no bank then existing could exceed the issue fixed for it.

If any banker who had retained the right of issue ceased to exercise this privilege, the fiduciary issue of the Bank might increase by a sum not exceeding two-thirds of the note-issue that lapsed.

Any one was entitled to demand notes from the Bank in exchange or standard gold at the rate of £3-7-9*d.* per ounce.

On September 8, 1844, the Bank's note-issue amounted to £28.4 millions, of which the fiduciary issue was £15.7 millions, and the Bank held £12.7 millions in gold against the notes. By July 15, 1914, the Bank's note circulation had increased to £56.9 millions, and the fixed fiduciary issue to £18.4 millions. The Bank duly held £38.5 millions in gold against the notes.

The Act had necessarily to be " suspended " in crises, to enable the money supply to be increased against securities. The first suspension came on October 25, 1847, preceded by a number of bank failures. " The Bank of England had to choose between the utter ruin of English trade by an absolute refusal to discount, and the violation of the Act of 1844."[8] The situation changed as if by magic when it became known that the Bank had been empowered to issue notes in excess of the legal limit. "The certainty that money could be got took away all desire to have it."[9] The Bank prepared £400,000 additional notes, but it was not found necessary to put them into circulation.

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[7] Pp. 30-31,

After 1847, the Bank Act was suspended on November 12, 1857, May 12, 1866, and July 31, 1914. There were also other occasions on which suspension seemed likely.

In the crisis of 1857 the Bank issued £2,000,000 of notes in excess of the statutory limit. In the crisis of 1866, as in that of 1847, the Bank was not obliged to exceed the legal limit of note-issue, but that the position was sufficiently serious may be judged from the statement of a representative of the joint-stock banks to a representative of the Bank of England before the suspension: "I can draw a couple of cheques tomorrow morning which will shut you up at once."[10]

While the Bank Act was suspended on the outbreak of the first world war, the Bank did not issue additional notes. Currency notes for £1 and 10*s*. were issued by the Treasury (Government).

7. THE ACT OF 1928

By the Currency and Bank Notes Act of 1928 the two note-issues were amalgamated as one issue under the control of the Bank of England. The new fiduciary issue was fixed at £260 millions. The Act of 1928 thus maintained the principle of fixed fiduciary issue of the Act of 1844, but, at the same time, it gave power to the Treasury, on the application of the Bank of England, to assent to an increase or reduction of the amount of the fiduciary issue. The authority to increase the fiduciary issue was subject to two conditions, (*a*) it would run for a period not exceeding 6 months and (*b*) it might be renewed or varied on the representation of the Bank, but would not remain in force for more than two years without the sanction of Parliament.

8. CHANGES SINCE 1928

Changes in the fiduciary issue since 1928 are shown by the following statement.

Changes in Fiduciary Issue Since 1928

Date		From £(000,000's)	To
1928 — November 22	...	...	260
1931 — August 1	...	260	275
1933 — March 31	...	275	260
1936 — December 15	...	260	200
1937 — November 17	...	200	220
1938 — January 19	...	220	200
December 7	...	200	230
1939 — January 6	...	230	400

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8. Andreades, p. 336.
9. *Ibid.*, p. 336.
10. *Ibid.*, p. 359.

Date		From £ (000,000's)	To
	February 28 ...	400	300
	September 5 ...	300	580
1940 —	June 12 ...	580	630
1941 —	April 30 ...	630	680
	August 30 ...	680	730
	December 3 ...	730	780
1942 —	April 22 ...	780	830
	July 28 ...	830	880
	December 3 .	880	950
1943 —	April 14 ..	950	1,000
	October 6 ...	1,000	1,050
	December 7 ..	1,050	1,100
1944 —	March 7 ..	1,100	1,150
	August 2 ...	1,150	1,200
	December 6 ...	1,200	1,250

The Bank Returns, 1844 and 1946. After the passing of the Act of 1844 the weekly return of the Bank of England had the following form :—

Weekly Return of the Bank of England, week ending September 7th, 1844 (New form) :—

Issue Department

Notes issued ...	£ 28,351,295	Government Debt ...	£ 11,015,100
		Other securities ...	2,984,900
		Gold coin and bullion ...	12,657,208
		Silver bullion ..	1,694,087
	£ 28,351,295		£ 28,351 295

Banking Department

Proprietors' Capital .	£ 14,553,000	Government securities, (including the dead weight annuity) ...	£ 14,554,834
Rest ...	3,564,729		
Public deposits ...	3,630,809		
Other deposits ...	8.644,348	Other securities ...	7,835,616
Seven-day & other bills ...	1,030,354	Notes	8,175,025
		Gold and silver coin ...	857,765
	£ 31,423,240		£ 31,423,240

M. Marshall (Chief Cashier)

It was provided by the Act of 1844 that the silver in the Issue Department was never to exceed one-fourth of the gold.

A contrast is provided by the Bank Returns for May 8, 1946. †

BANK OF ENGLAND RETURNS
May 8, 1946.

Issue Department

Notes issued	£		£
In circulation ...	1,342,103,659	Govt. Debt. ...	11,015,100
In Banking Deptt. ...	57,144,174	Other Govt. securities ...	1,388,140,688
		Other Securities ...	835,170
		Silver coin ...	9,042
		Amount of Fiduciary Issue	1,400,000,000
		Gold Coin and Bullion (at 172s. 3d. per oz. fine)	247,833
	£ 1,400,247,833		£ 1,400,247,833

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† *Economist*, dated May 11, 1946, p. 779.

Banking Department

	£		£
Capital	14,553,000	Government Securities	214,725,211
Rest	3,329,557	Other Securities :	
Public Departments*	14,095,896	*Discount and advances*	*17,794,738*
		Securities	*18,310,749*
Other Departments.*			
Bankers	*226,041,938*		36,105,487
Other Accounts	*51,183,035*	Notes	57,144,174
		Gold and Silver coin	1,228,554
	277,224,973		
	309,203,426		309,203,426

*Including Exchequer, Savings Banks, Commissioner of National Debt and Dividend Accounts.

The Bank Act of 1844, as we have seen, made the Bank of England note equal to a fixed weight of gold. Till the outbreak of the first world war, the principles underlying that Act were faithfully observed, except when the Act was suspended. The Cunliffe Currency Committee of 1918 recommended the restoration of the former gold standard, with the fixation of the fiduciary issue at a level to be arrived at by experiment. But, as has been stated above, the Act of 1928 recognised that the fiduciary issue could be varied under prescribed conditions. This was ‘ the first permanent breach,’ in the doctrine of a fixed fiduciary issue. When England left the gold standard, the fiction that a pound note represented an immutable weight of gold was abandoned, and also the concept that the size of note issue must rise and fall with each change in the size of the gold stock.

On January 6, 1939, the fiduciary issue was increased from £230 millions to £400 millions, but on February 28, of the same year, it was reduced to £300 millions. In September 1939, as a war measure, gold to the value of approximately £280 millions, practically the whole amount, was transferred from the Issue Department of the Bank to the Exchange Equalisation Account. The fiduciary issue was thus increased to £580 millions. By successive stages the fiduciary issue was raised to £1400 millions, at which figure it stood on May 8, 1946. The Bank of England note has now practically no gold backing at all.

9. THE RETURN OF THE BANKING DEPARTMENT

Liability. The Bank of England is a private corporation and the proprietors' capital is a liability. The original capital of the Bank was £1,200,000, which has now risen to over £14 millions. The Bank's Rest or Reserve Fund was somewhat lower in 1946 than in 1844.

Public deposits for 1946, include, in addition to the home accounts of Government departments and funds, the accounts of the National Debt Commissioners.

Bankers' Deposits are, for the greater part, those of the London Clearing banks, though they may include the deposits of any

British banks, doing business mainly in the United Kingdom. This item, and the reserve and ‘ ratio ’ referred to below, are indices of conditions in the money market.

Other Accounts include mainly the deposits of English banks whose principal activities are outside the United Kingdom, those of other central banks, colonial banks, merchant bankers, discount houses, issuing houses, the Indian Government, colonial governments, and the accounts of the Bank's private customers.

On the assets side the item ‘ Government Securities ’ represents direct obligations of the British Government, and includes long-term securities, ways and means advances to the Exchequer, and such Treasury bills as the Bank has purchased on the market on its own initiative. This item reflects the Bank's ‘ Open Market Policy.’

Discounts and advances consist entirely of commercial and Treasury bills discounted by the Bank for its clients or accepted as collateral for advances to discount houses, private customers and bill brokers.

Securities include securities other than direct British Government issues with or without the guarantee of the British Government, commercial bills—domestic and foreign—purchased by the Bank on its own initiative, and any balances the Bank may hold with any other central banks.

Finally, we have the *Reserve*, consisting of notes, which are an obligation of the Issue Department but an asset of the Banking Department, and gold and silver coin (composed almost entirely of silver coin). The ‘ ratio ’ or ‘ proportion ’ is the proportion of this ‘ reserve ’ to deposits.

The following statement shows the change in the position between 1937 and 1943 :—

BANK OF ENGLAND

Last Wednesday of the year.	1937	1939	1943
A. *Issue Department.*			
ASSETS			
1. Gold	326·4	0·2	0·2
2. Fiduciary issue	220·0	580·0	1,100·0
(*a*) Silver coin	..	0·7	...
(*b*) Government debt	11·0	11·0	11·0
(*c*) Other Government Securities ...	208·7	565·3	1,088·3
(*d*) Other Securities	0·3	3·0	0·7
3. Total Balance-Sheet	546·4	580·2	1,100·2
LIABILITIES (NOTES ISSUED) ..			
4. Notes in circulation	505·3	554·6	1,088·7
5. Notes in Banking Department ...	41·1	25·6	11·5

Last Wednesday of the year.	1937	1939	1943
B. *Banking Department.*			
Assets			
6. Reserve	41·9	26·6	12·4
(*a*) Notes	41·1	25·6	11·5
(*b*) Gold and silver coin ...	0·8	1·0	0·9
7. Government Securities	114·6	151·5	292·0
8. Other Securities	30·1	28·9	18·4
(*a*) Discounts and advances ...	9·2	4·3	2·5
(*b*) Securities	20·9	24·6	15·9
9. Total Balance-sheet	186·6	207·0	322·8
Aggregate net Balance-sheet (A+B)[1]	691·9	761·6	1,411·5
Liabilities			
10. Capital	14·6	14·6	14·6
11. Rest	3·4	3·4	3·3
12. Public deposits	11·4	29·7	10·3
13. Other deposits	157·2	159·3	294·6
(*a*) Bankers	420·6	117·3	234·3
(*b*) Other accounts	36·6	42·0	60·3
Discount rate (%)[2] ...	2	2	2

1. Less notes held in Banking Department [item 6 (a) above.]
2. Date of last change: October 26th, 1939.

10. THE LONDON MONEY-MARKET

The Central Bank according to the Macmillan Committee, should possess four rights : the right of note-issue, the right to hold the reserves of the commercial banks, the right to buy ~~and sell securities, and~~ the right to discount. To these four rights, a fifth ~~may be~~ added, the right of holding the account of the Government. ~~The financial~~ operations of a government are conducted on so large a scale that unless they were conducted through the Central Bank they might derange the money-market. The Central Bank is the custodian of the money-market, and, as such, it must have the custody of Government funds also.

The Central Bank has a monopoly of note-issue, and thus regulates the currency. It is the guardian of the reserves meant to keep the external value of the currency stable, and therefore it must have the power to control credit. It determines the price of credit through its Bank Rate and regulates the volume of credit in virtue of holding the bankers' reserves. As we shall see, in certain countries, member banks are required by law to maintain minimum balances with the Central Bank. Open market operations (buying and selling securities) are an important means of regulating the volume of credit created by member banks, and their effect may be re-inforced, as in the United States, by the power of the Central Bank to alter minimum reserve requirements.

We have so far studied the regulation of currency by the Bank of England. We have still to study its other functions, which makes it necessary to obtain some knowledge of other members of the London money-market.

About the Bank of England we may add that is not only the oldest Central Bank of the world, but a unique institution in the sense that it is a private institution subject to no legal control except in regard to its power of issuing bank notes and granting loans to the State. Sir Ernest Harvey, Deputy Governor of the Bank, said in the course of his evidence before the Macmillan Committee that, apart from using any of its funds in dealing in merchandise or wares of any description, the Bank of England was free to do whatever it liked : " The restrictions, so far as there are restrictions, under which the Bank works in its operations are restrictions which the Bank has imposed upon itself and which, of course, it has the power to alter. "[11]

The Bank of England no longer keeps the gold reserve—it has been transferred to the Exchange Equalisation Account, under the charge of the British Treasury. But what Bagehot wrote in 1873 is still largely true—it depends on the wisdom of the directors of this one joint stock company, ' whether England shall be solvent or insolvent.'[12]

We already know how a rise in the Bank rate tends to check a foreign drain of gold. The account written by Bagehot 70 years ago will be read with interest.*

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[11] *Report of the Macmillan Committee*, p. 25.

[12] *Lombard Street*, p. 36.

*" The Bank of England must keep a reserve of ' legal tender ' to be used for foreign payments if itself fit, and to be used in obtaining bullion if itself unfit. And foreign payments are sometimes very large and often very sudden. The ' cotton drain,' as it is called—the drain to the East to pay for Indian cotton during the American Civil War—took many millions from this country for a series of years. A bad harvest must take millions in a single year. In order to find such great sums, the Bank of England requires the steady use of an effectual instrument.

" That instrument is the elevation of the rate of interest. If the interest of money be raised, it is proved by experience that money does come to Lombard Street, and theory shows that it ought to come. To fully explain the matter I must go deep into the theory of the exchanges, but the general notion is plain enough. Loanable capital, like every other commodity, comes where there is most to be made of it. Continental bankers and others instantly send great sums here, as soon as the rate of interest shows that it can be done profitably. While English credit is good, a rise of the value of money in Lombard Street immediately, by a banking operation, brings money to Lombard Street The rise in the rate of discount acts immediately on the trade of this country. Prices fall here ; in consequence imports are diminished, exports are increased, and, therefore, there is more liklihood of a balance in bullion coming to this country after the rise in the rate than there was before." (*Lombard Street*, by Walter Bagehot, pp. 47-48.)

There is one important change since the time of Bagehot. Seventy years ago the market could not get along without the 'legal tender' provided by the Bank of England. When new money was needed, recourse was compulsorily had to the Bank of England, and the raising of the Bank rate was immediately effective. The Bank of England alone was in a position to 'pour in the new money.' When the bill-brokers got into difficulties, they went to the Bank of England. When the joint-stock banks wanted new money, the only resource was the Bank of England. Under such conditions raising of the Bank rate was automatically followed by a rise in the market rate of discount.

At present the joint-stock banks are the chief factory of credit money, and the development of the cheque has rendered the note currency of comparatively little importance. Today the Bank of England has to make its rate of discount effective by 'open market operations.'

11. JOINT-STOCK BANKS

The joint-stock or the cheque-paying banks (1) create the currency used in the great majority of business transactions in England ; (2) discount bills and make advances to bill-brokers ; (3) settle the current rates for money in London (' money ' means loans to bill-brokers and discount houses at very low rates for short periods not exceeding a week) ; (4) regulate, in normal times, the discount rate in London ; (5) accept bills of exchange ; and (6) make advances to customers or stock-brokers against Stock Exchange securities for dealings in stocks and shares.

12. BILL-BROKERS AND DISCOUNT-HOUSES

Bill-brokers and discount-houses stand between the joint-stock banks and the Bank of England. When the joint-stock banks are in need of liquid funds, they recall their loans to bill-brokers and discount-houses. These loans ere 'at call' and short notice, and constitute their 'second line of defence' in times of trouble. Their 'first line of defence' is naturally cash in hand and at the Bank of England.

The original bill-broker was a bill-broker pure and simple. He helped in finding a buyer of bills for the seller of bills for a commission. This pure and simple bill-broker is called 'a running broker.' He is not of great importance now.

The retail dealer in bills does not work for a commission but buys the bills on his own account to sell them again at a profit. He borrows money from the joint-stock banks.

Discount houses have grown out of the retail dealer in bills. They work on a large scale, have command over large resources, and add to their funds not only by borrowing from the joint-stock banks, but by attracting deposits. They buy bills and hold them till maturity.

13. ACCEPTING HOUSES

The business of acceptance is also undertaken by the joint-stock banks, but special firms have specialised in it, for which reason they are known as 'accepting houses.'

London draws few bills but accepts many. London accepts bills not only on its own account but for foreign countries as well. Why ?

Suppose we export jute to a South American Republic. We may draw a bill on the importing firm, but who knows this importing firm ? A bill accepted by this firm could not be readily discounted. If, now, a London accepting house accepted the bill on behalf of this South American firm, the bill would become marketable.

London accepting houses earn a fortune annually by accepting bills on behalf of other countries. Their services are in demand because of their high credit.

Accepting houses have grown out of merchant-firms. Suppose there are two merchants *A* and *B*, both engaged in foreign trade. *B* finds that bills accepted by him cannot be readily sold. *A* enjoys a wider reputation, and therefore *B* approaches *A* and says " Will you accept this bill drawn on me ? " *A* might be willing to do so, for a consideration. Before the bill matures, *A* must be placed in funds by *B*.

Finding that he can earn an income on the strength of his reputation for reliability, *A* may give up his exporting or importing business and specialise in acceptance. A merchant has grown into an accepting house.

14. THE BILL MARKET

The bill market is more highly developed in England than in other countries, and this fact, combined with the world-wide reputation of London accepting houses and bankers, made London the clearing house of the world.

The bill and the discount market have greatly changed in recent years, to which attention will be drawn presently.

We have seen that the Bank of England operates under no restrictions. While it is the Government banker and is in the closest association with Government, the Government is not represented in its management. Absence of Government control marks out the Bank of England from most, if not all Central Banks.

Secondly, while joint-stock banks maintain balances with the Bank of England, they are not compelled to do so by law. There are no minimum reserve requirements in England as, for example, in India or the United States.

Thirdly, there are no direct borrowing or lending transactions between the Bank of England and the joint-stock banks. The link of connection between the Bank and the joint-stock banks is provided by the discount market. The discount market works with funds borrowed at call from the joint-stock banks. When a joint-stock bank needs cash, it recalls its loans to the discount market, and the discount market, if it cannot supply itself with necessary funds from other banks or other sources, takes bills to the Bank of England for discount. Sir Ernest Harvey stated before the Macmillan Committee :

"At the Bank, our regulations as regards the bills we accept, though they are not governed by any statutes or anything of that kind, are in fact quite definite, and have been taken more or less as a model by most foreign Central Banks. They are, that the bills should bear at least two good British names, one of which must be the acceptor. The discount market knows that . . . . Of course I do not mean to say that any member of the discount market can come in and get accommodation to an unlimited extent. The relations between the Bank and the discount market are exceedingly intimate."[13]

He added that advances to the discount market were usually made for periods of a week and at a rate of ½ per cent over the Bank rate.

Thus the Bank of England assists the joint-stock banks not directly but indirectly. It rediscounts bills for the discount market, which enables the discount market to repay its loans to the joint-stock banks, thus placing them in funds again. The Macmillan Report says :

"The link between the Bank and the commercial banks is established through the discount market which is the first outlet of any surplus funds held by the banks and from which funds are withdrawn when the banks find it necessary to replenish their reserves. If the withdrawal causes a shortage of funds in the market, the market borrows in one form or another from the Bank of England and the accommodation given by the Bank provides the means of replenishing the cash resources of the commerical banks."[14]

This indirect connection between the Central Bank and joint-stock banks is a characteristic feature of the London money market.

15. THE BILL MARKET

Sometime ago the bill of exchange was the most important instrument used in financing foreign as well as internal trade. Bills used in foreign trade are known as foreign bills of exchange, and those used in the internal trade of the country, inland or internal bills. J. M. Keynes in his Memorandum on the proposals regarding a Central Bank for India referred to bills, as " the pivot " of the whole system of note-issue. This pivot was as good as missing in India when Keynes wrote. The Indian Central Banking Inquiry Committee (1931) commented on the scarcity of bills in India and said :

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[13] pp. 40-41.

[14] p. 45.

> " There is little doubt that the creation of the Reserve Bank with the resultant co-ordination of the various elements of the money-market and a unified control of credit and currency should do much to develop the use of commercial bills and ultimately create an active and efficient discount market in India."[15]

The Committee were thinking of the future development of the Indian-money market on the lines of the London money-market. They made a number of recommendations for developing the bill market in India, including the printing of bill forms in English and the vernacular in parallel, lowering the stamp duty on bills, and the standardization of customs governing the *Hundis.*

The bill of exchange is, in fact, an ideal form of investment from the point of view of a banker, for a genuine trade bill is self-liquidating. A banker having a portfolio of commercial bills, some of which are maturing daily, has thus command over liquid resources.

Writing in 1909 Hartley Withers, described the " beauties of the bill." A banker must know the difference between a bill of exchange and a mortgage. A mortgage, or loan against real property, houses and land, is not readily negotiable, for the title to property has to be carefully examined before the property can change hands. A bill of exchange, on the other hand, drawn against goods actually sold, is as good as cash. It pays itself on maturity.

16. KINDS OF BILLS. ANTICIPATORY BILL.

Bills are ordinarily drawn against produce or other goods in the course of being marketed or manufactured. But they may also be drawn in anticipation of the marketing of produce or production of finished consumers' goods. When thus created, such bills are known as anticipatory bills. A farmer, for example, wants agricultural machinery. A bill may be drawn against crops which are not yet ready, and discounted, to enable the farmer to buy the machinery he needs for his operations. A genuine bill drawn against his crops marketed later will discharge his obligation. If the machinery is purchased in another country, unnecessary movement of gold to pay for it is avoided by a bill drawn in anticipation of shipment of produce.

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[15] Para 604.

Accommodation or Finance Bills.—It has been estimated that 60 per cent of the amount of bills running on London in 1913 were finance bills. It is not easy to define finance bills (or accommodation bills), as they have a great variety of forms, A bill drawn against the credit of the creators of a bill is clearly a finance bill. The security in such a case is nothing except the credit of the person drawing it. A bill drawn by a firm on its own branch ("pig on park") is also a finance bill. Bills drawn against stock exchange securities are also generally classed among finance bills. Sometime ago finance bills also took the form of bills drawn against foreign exchange transactions.

Hire-Purchase Bills.—Houses may be bought from building societies on the instalment plan, the ownership being completed on the payment of the last instalment. Durable good like motor-cars, wireless sets, gramophones and household furniture are often sold on the hire-purchase system. This system gives rise to trade bills, as payment is spread over a period of time. The dealer, having drawn a bill, may sell it to a hire-purchase finance company, and thus obtain cash immediately. The finance company will now receive the instalments.

Municipal Bills.—Bills may be issued by local authorities. Pending a long-term loan, bills are drawn by the Metropolitan Water Board and Port of London Authority.

Ship-building bills are not re-discounted by the Bank of England. They are not self-liquidating as they are very often not paid immediately after the vessel is completed.

Foreign bills.—Bills are accepted in England by merchant bankers, accepting houses and banks against goods imported into England, against goods exported from England, and against goods which are exported from one overseas country to another.

We have explained above how exports of jute from India may be financed by means of a bill accepted in London. "The world-wide standing of the London accepting houses, in combination with the discounting facilities available and the maintenance of a free gold market," wrote the Macmillan Committee, "has led to the use of the sterling bill for international transactions in all parts of the world and not only for transactions in which this country is concerned either as importer or exporter."[16] Such bills are called inter-port bills.

With London accepting bills arising out of the foreign trade of the United Kingdom, and also out of transactions between other countries, it is not surprising that London became the biggest bills market in the world.

Mr. Foa in his evidence before the Macmillan Committee gave examples of bills which were handled by the discount market in London. They included bills drawn in connection with import of food for consumption in England ; export of Hessian cloth from Calcutta to New York ; bills drawn in Japan on an Australian bank in London for goods supplied to Australia ; bills against the export of wool, grown in Oxfordshire, to Boston, U .S. A ; anticipatory bills drawn from Finland for timber ; and foreign treasury bills issued in England.

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[16] *Report of the Macmillan Committee*, p. 41.

17. DECLINE IN INTERNAL BILLS

Mr. Foa also mentioned internal bills, *e g.*, bills drawn to finance the making of beet sugar in England, covering the period between the harvesting of the crop and the marketing of the finished product, sugar crystals ; and ship-building bills drawn to provide money as the building proceeded. The latter were six months' bills drawn by the builder on the purchaser.

The Macmillan Committee regretted the decline in the use of commercial bills in the internal trade and business of the country. It said :

> " It is appropriate to say here and in connection with short-term credit that all concerned would benefit by a more extended use of commercial bills (*i.e.*, bills given by a purchaser to a supplier) which have largely disappeared as part of the mechanism of home business. To those who find it necessary for good reason to give extended credit, finance would be rendered more easy if their ' account receivable,' were in the form of commercial or trade bills rather than in the form of mere debts."[17]

Internal bills used to perform a function of vital importance in England about a hundred years ago before branch banking developed. The resources of the country banks were inadequate to meet trade demands, and bills drawn in the country districts went to London for discount. London bill brokers and discount-houses attracted surplus funds from all over the country, and it was through their agency that the spare capital of one district was utilized in another district where there was a demand for it. They thus served as " equalising agents."

The development of branch-banking enabled the joint-stock banks to take over this function, and the importance of the internal bills as a means of obtaining accommodation declined. In 1890 there were 104 banks in England and Wales with 2,203 branches; in 1915, 26 banks with 6,027 branches, and in 1938, only 15 banks but with 10,151 branches. . A bank with numerous branches is able to employ the surplus cash of one part of the country to meet the requirements of another part of the country. The " open credit system," or loans, advances and overdraft facilities effectively displaced the bill.

18. DECLINE IN FOREIGN BILLS

An article entitled " Decline of the Bill of Exchange " which appeared in the London *Economist* dated March 26, 1938, traced the heavy fall in foreign drawn and inland drawn bills outstanding in the United Kingdom between 1926-27 and 1936-37. The method of calculating the value of outstanding bills deserves notice. The stamp-duty realised from stamps on foreign drawn bills was £ 286,065 in 1936-37. What was the value of the bills which paid this duty? The rate of the duty was 1 shilling per cent, equal to 10 shillings, or £ ½ per £1,000 per annum. £ ½ would represent a value of £ 1,000 if the bills had a maturity of one year, but it may be assumed that the bills which paid this duty were three months' bills. Thus a revenue of £ ½ would represent a value of £ 1,000 × ¼ = £250. Therefore a revenue from stamps of £286,065 would give the foreign drawn bills a value of £286,065 × 250 × 2 = £143,032,500.

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[17] p. 169.

Foreign drawn bills rose to their peak in 1928-29, in which year their estimated value was £540,000,000. During the next four years their value fell to one-quarter of this figure. There was a slight recovery in subsequent years.

The decline in inland bills after 1929 was not as steep as in the case of foreign drawn bills. Their maximum value was £203,000,000 in 1929-30.

The amont of bills outstanding depends on two factors, the volume of trade financed by bills and the level of commodity prices. Both these factors were pulling in the same (downward) direction during the Great Depression.

A third factor responsible for the decline of foreign bills of exchange is the use of inter-bank credits for payments between countries. The banks of leading countries now freely buy and sell foreign currencies. Transfers may therefore be made directly by cheques, instead of through bills of exchange. Bills of exchange, says Crowther "do not now assist in settling more than a fraction even of those international transactions which are concerned with the actual export or import of goods, let alone the great body of purely financial dealings."[18] If an Indian bank has accounts with London and New York banks, and its resources are adequate, it will be in a position to deliver sterling and dollars for rupees, and rupees for sterling and dollar, whenever called upon to do so. In a few hours money may be transferred telegraphically from one country to another.

19. THE TREASURY BILL AND THE DISCOUNT MARKET

The decline in the bill of exchange made it imperative for the London discount market to find another outlet for its funds. The discount market was hit hard by the Great Depression. It became "one of the permanently depressed areas" of Britain.

The Treasury Bill partly took the place of the bill of exchange but it was not a satisfactory substitute. In regard to the Treasury Bill the article in the *Economist* referred to above said ;

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[18] *An Outline of Money*, p. 234,

"Its discounting calls for no special skill and has in fact become stereotyped to the point at which it now yields next to no profit."

The discount market borrowed money from the banks at $\frac{1}{2}$ per cent and employed it in the purchase of Treasury Bills at an average price of 9/16 per cent. The margin of 1*s.* 3*d.* (1/16 of £ 1) did not cover even working expenses.

It may be stated incidentally that Treasury bills are a floating obligation of a Government. They are issued by tender under discount and are current for a period not exceeding a year; most generally they are issued for three months.

In Britain, the Exchequer bill having a maximum currency for five years, was the sole marketable instrument of Government floating debt till 1877. On the advice of Walter Bagehot the Treasury Bill was created in that year, and it proved a great success. The Exchequer Bill disappeared in 1897.

20. FLOATERS AND THE DISCOUNT MARKET

The *Economist* predicted that the ultimate result of the decline in the commercial bill of exchange would be "to wed the discount market more strongly than ever to its business in floaters and gilt-edged securities of more or less short currency."

This has indeed come to pass.

A floater means any security on which the Bank of England will lend money to the discount market, chiefly short-dated Government securities, *e. g.*, Treasury Bonds, Conversion Loan, National Defence Loan, etc.

The London correspondent of the *Capital* of Calcutta, writing in the issue of that journal dated May 16, 1946, described the effects the Governments short-term financing of the war on the London discount market. The number of discount houses has not increased but the existing firms have expanded their resources. The business of the discount market, says the correspondent, "has progressed further along the road on which it was already travelling. To day the position has been reached when the main profit-earning activity of the discount houses is dealing in bonds, with Treasury Bills a poor second and Commercial Bills nowhere."

Bond dealing is much more profitable than bill business. Bills yield an "infinitesimal return" ($\frac{1}{16}$ or $\frac{1}{32}$ per cent), while loans obtained from banks at $\frac{5}{8}$ to $\frac{3}{4}$ per cent give a profit of just over one per cent.

Much more capital and reserves are required by a firm for dealing in bonds than in bills. The discount houses work with borrowed money, but they require capital and reserves for obtaining loans. The total of short and medium bonds maturing in Britain over the next ten years is estimated to be almost £4,000 millions, which explains the capital expansion of the discount houses.

It is anticipated that " the reliance of the discount houses on bond operation will not only henceforward be a permanent feature, but, if anything, be intensified."

21. JOINT-STOCK BANKS IN ENGLAND AND WALES

The following statement shows the position of the joint-stock banks in England and Wales between 1938 and 1943.

	1938	1939	1940	1941	1942	1943
No. of Banks	15	13	13	13	13	13
Branches and sub-branches ...	10,151	9,751	9,702	8,626	8,326	8,279
			(£000, 000's)			
ASSETS.						
1. Inland notes and balances with Central Bank .	504.6	556.2	601.2	653.9	695.5	760.3
2. Bills discounted and bought ...	234.4	334.4	580.0	931.6	1,094.8	1,441.3
3. Investments and securities ...	652.9	632.6	793.9	1,020.0	1,141.1	1,172.8
(*a*) Government ...	571.7	547.8	712.1	948.6	1,071.8	1101.3
(*b*) Other	81.2	84.8	81.8	71.4	69.3	71.5
4. Loans and Advances	977.7	994.0	903.3	802.7	773.0	741.7
5. Cover for acceptances ...	132.7	117.3	108.9	111.6	93.5	100.9
6. Premises, etc., 7. Sundry assets ...	47.3	48.0	46.0	44.8	44.2	43.4
Total Balance Sheet	2,549,6	2,682.5	3,033.3	3,564.6	3,842.1	4,260.4
LIABILITIES.						
8. Capital paid up ...	80.6	79.1	79.0	79.0	79 0	79.0
9 Reserve Funds ...	61.6	61.2	62.3	62.4	63.0	64.6
10. Profit and Loss, etc.	5.8	5.5	5 3	4.9	5.0	5.2
11. Notes in circulation	0.1	0.1	0.2	0.2	0.2	0.2
12. Deposits ...	2,268.8	2,419.3	2,777.6	3306,5	3,601.4	4,0.0.5
13. Acceptances and endorsements ...	132.7	117.3	108.9	111.6	93.5	100.9

(*Source* : *Money and Banking* 1942-44 (League), p. 195.)

" Under Assets ," bills discounted and bought do not represent the total bill holdings of all the banks, as some of the minor banks include Treasury bills in their figures for Government securities, item 3 (*a*).

" Other investments " consist, in addition to gilt-edged, of stocks, shares and debentures of industrial companies. The banks do not give full details of the composition of their investments.

Under *Liabilities* " notes in circulation " refers to the Isle of Man, which is not governed by the English currency legislation.

Deposits.—The banks do not show current accounts separately from deposit accounts. The division of total deposits into current accounts and deposits accounts is thus shown in *Money and Banking*, 1942-44 :—

Monthly average December £(000,000's)

Year		Current Accounts	Deposit Accounts	Total
1937	...	1,284	1,026	2,310
1938	...	1,256	997	2,253
1939	...	1,398	1,043	2,441
1940	...	1,770	1,030	2,800
1941	...	2,168	1,161	3,329
1942	...	2,429	1,200	3,629
1943	...	2,712	1,319	4,031

Acceptances and Endorsements.—The greater part of the sums given represent bills accepted by the banks on behalf of their customers. These are almost entirely foreign bills accepted on behalf of home importers.

22. NATIONALISATION OF BANKS

A resolution was passed by a large majority at the British Labour Party Conference at Leicester in 1932 demanding the nationalisation of banks as soon as a Labour Government came into power. This resolution was carried in opposition to the wishes of the Executive of the Labour Party.

The Labour Party is in power in Britain. We know nothing about its intentions, if it has any, to nationalise all banks. But it has decided to nationalise the Bank of England.

When the decision is enforced, the chief executive officers of the Bank will be appointed by the British Government.

As a matter of fact the chief executive officers of the majority of Central Banks are appointed by the Government, either directly, or with the advice of the Board of Directors, or with the approval of the Legislature.

In our own country, the Governor and two Deputy Governors of the Reserve Bank are appointed by the Central Government "after consideration of the recommendations made by the Board in that behalf." The Governor and two Deputy Governors of the Bank of France are appointed by the President of the French Republic. The President and other members of the Management of the Reichsbank, after 1937, were appointed by and responsible to the Fuehrer. The Emperor of Japan nominated the Governor of the Bank of Japan. The Governor and Deputy Governor of the Bank of England, on the other hand, are elected by the Court of Directors from among themselves.

Bagehot thus refers to the appointment of the Governor of the Bank of France by the State : "The French have generally a logical reason to give for all they do, though perhaps the results of their actions are not always so good as the reasons for them."[19] As for Britain, he said :

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[19] *Lombard Street*, p. 231.

> " No English statesman would consent to be responsible for the choice of the Governor of the Bank of England. After every panic, the opposition would say in Parliament that the calamity had been ' grievously aggravated,' if not wholly caused, by the ' gross misconduct ' of the Governor appointed by the ministry."[20]

Bagehot did not want a permanent Governor of the Bank of England. The reason is best stated in his own words :

> " A permanent Governor of the Bank of England would be one of the greatest men in England. He would be a little ' monarch ' in the City ; he would be far greater than the ' Lord Mayor.' He would be the personal embodiment of the Bank of England ; he would be constantly clothed with an almost indefinite *prestige*. Everybody in business would bow down before him and try to stand well with him, for he might in a panic be able to save almost anyone he liked, and to ruin almost anyone he lked."[21]

The Governor and Deputy-Governor of the Bank of England serve in their respective offices for a period of two years, the Governor being succeeded by the latter, unless re-elected by the Court of Directors. Sir Montaigu Norman was unanimously re-elected Governor for 24 years in succession. He was practically a permanent Governor of the Bank of England for a generation ; as to whether everybody in business actually bowed down before him, or whether he had actually the power, in a panic, of saving almost everyone he liked and of ruining almost anyone he disliked, is more than the present writer can say. Of course Bagehot did not literally mean what he said—he had an extremely pleasant way of expressing himself.

Bagehot favoured the appointment of a trained banker as a wholetime permanent Deputy-Governor, on the model of the permanent Under-Secretary in politics. Bagehot added :

> " The permanent Deputy-Governor must be a director and a man of fair position. He must not have to say ' Sir ' to the Governor. There is no fair argument between an inferior who has to exhibit respect and a superior who has to receive respect."[22]

23. THE ARGUMENT OF G. D. H. COLE

Bagehot, it is evident, attached little importance to the " logical reasons " which led to the appointment of the Governor of the Bank of France by the French Government. But the fact remains that in recent times the State has assumed a more important role, almost in all countries, in respect of management of Central Banks. Before 1914, and in the years immediately following the end of the first world war, on the contrary, great stress was laid on the desirability of preserving or increasing the independence of Central Banks. From independence to nationalisation is an extreme step.

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[20] *Ibid*, p. 231.

[21] p. 226.

[22] *Ibid*., p. 236.

The case for the nationalisation of the Bank of England has been logically presented by G. D. H. Cole. He admits that the Bank of England, while it is owned by shareholders, does not exist for making profits for its owners. " Its profitability is so well assured that those in charge of it do not need to influenced in their actions by the profit motive."[23] For a long time past, the Bank of England, like other Central Banks, has paid a fixed rate of dividend to its shareholders. The State does not share in the profits of the Banking Department of the Bank, but claims the profit of the note-issue. In 1931, when a profit arose on account of the revaluation of sterling, the profit was segregated in a separate fund (Exchange Equalisation Account). The profit had been created by State action and belonged to the State.

Cole also admits that while the Bank, and not the State, appoints the Governor and the new Directors, " normally the two agree about the appointment." There is close co-operation between the Bank and the Government and " the question ' which controls the other,' is really unanswerable."

But the Bank is a great city institution and it represents the traditions of the city. The Court of Directors "is almost wholly representatives of capitalist business interests." The Bank is an embodiment of " high finance," not of labour policy and principles. So long as the Government of Britain was run by Liberals and Conservatives, no conflict of a fundamental nature could arise between the Government and the Bank. But Labour is socialist in outlook, and socialism and " high finance " do not go together.

Is Socialism coming to Britain ? If British industries are to be nationalised, then it follows logically that not only the Bank of England but the Joint-stock banks must be nationalised too, as was demanded by the British Labour Party Conference in 1932. But socialism in this sense is definitely not coming to Britain. Karl Marx was disappointed with the "first-born sons of industry," or British workers. There was a " complete " divorce of the working class from property in England in Marx's time; but no social revolution came. There is less reason to expect one at present when the poletariat in the Marxian sense is tending to disappear from Britain.

But Cole and the British Labour Party stand for " a planned policy of full employment," which cannot be realised without the assumption by the State of the control and direction of the whole economic and financial machine. The Central Bank occupies a key position in the business life of a country. The words of Bagehot may be recalled—the solvency or insolvency of England depended on the wisdom of the Directors of the Bank of England. To-day

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[23] *Money Its Present and Future*, p. 192.

"full employment" or large-scale unemployment is the choice. It is not logical that the choice should rest with a joint-stock company, in whose management the State has no voice. It is conceivable that conflicts may arise between the Government and the Bank on such vital questions as that of devaluation of the pound, international monetary co-operation, and action to be taken in a financial panic. When a dispute arises, who is to have the final word, the Bank or the Government?

Let us take our own case. At any time after its foundation the Reserve Bank might have felt that, in the interests of India, it was necessary to depress the exchange value of the rupee below the sterling level. If Government differed, whose view was to prevail? Surely it is not possible to instal the Governor of the Reserve Bank of India in the Governor-General's *gaddi*!

In fact the Reserve Bank of India has never failed to give effect to Government's financial policy, which was not always a policy which met the approval of the shareholders of the Reserve Bank. There was a strong feeling in the country against gold exports, which continued for some time after the outbreak of the second world war. At the sixth annual general meeting of shareholders of the Reserve Bank, held on 5th August, 1940, the question was asked whether the increase in sterling securities as cover for the note-issue in preference to gold was to India's advantage. Sir James B. Taylor, Governor of the Bank, said in reply:

"The Reserve Bank purchased gold for other Central Banks who obtained the gold not for hoarding purposes but for purchasing dollars for the prosecution of the war; similarly gold had been exported for the same purpose, in the advantage of which India obviously shared."[24]

The Reserve Bank was carrying out Government policy, and it could not do otherwise.

The same is essentially true of the Bank of England. There have been occasion when differences arose between the Bank of England and the Government of the day on financial policy, but the differences were of a minor character. On general questions of policy the Bank and the Government have always been in agreement. At the end of the first world war, on 30th November, 1919, the Bank of England protested to the Treasury against the amount and duration of Ways and Means advances which had become of the nature of a continuous loan, and expressed "the earnest hope that such loans may hereafter be obtained from the public, and advances from the Bank once more confined to the temporary requirements of the Treasury." The Bank was entitled to make this protest. In 1931 the Bank made a loan to the Credit-anstalt of Austria on its own initiative, to which objection may be and was taken. It also protested in the same year against Government's expenditure on unemployment. But these are small points.

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[24] *Report of the Sixth Annual General Meeting of Share-holders*, p. 41.

The cheap money policy which the Bank pursued as a means of overcoming the Great Depression had not only the support of the Government, but was a Government policy. The financial machine cannot work satisfactorily if the Government and the Central Bank disagree about fundamentals and begin to pull in opposite directions. The result would be chaos.

Logic demands the subordination of the Central Bank to Government, and logic has never been the strong point of the British people. But they know how to " muddle through " situations, however difficult. The British constitution is not a model of logical perfection, but British democracy is the most wonderful democracy in the world, great in war and great in peace.

In view of the great tradition which the Bank of England represents, the sterling commonsense of the British people and their high discipline, nationalisation of the Central Bank, which would be imperative in other cases, is not imperative in England. Still we may consider how British socialists would reconstruct the Bank of England.

The State would take the place of the shareholders of the Bank, paying off their capital. The State would directly appoint the Governor, Deputy-Governor and the Directors. The best men would be chosen for the two highest executive posts, but not as representatives of any particular interest or group. This means that these appointments would not be political. Again, the individuals forming the Court of Directors would not be appointed as representatives of particular interests. Cole favours a small, full-time Court of individuals chosen for their personal competence. They would be appointed for a period of years either by the Prime Minister or a Minister in charge of the State's economic plans.

When the Bank of England has been nationalised, the regulation of credit policy and the management of the foreign exchanges would be integrated under a single authority—that of the State. At present the Exchange Equalisation Account, managed by the Treasury, controls the external value of the pound, while the internal value is regulated by the Bank of England through its credit control.

24. THE COMMERCIAL BANKS

Amalgamations have reduced the number of commercial banks in England and Wales to 13. These banks still compete with one another in a restricted sense. " But," Cole admits, " they work closely together, and follow in all major matters a policy in common."[25] As in the case of the Bank of England, they pay stabilised rates of dividend.

Subject to the Bank of England's control, these banks govern the volume and distribution of credit. Conceivably their policy may not harmonise with a socialist policy of creating and maintaining conditions of full employment.

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[25] *Money*, p. 199.

There are three main objections to the socialisation of commercial banks. Banks, whether owned by the State or under State control, would know too much about people's private and business affairs, and this knowledge may be used by the tax gatherer. But privacy as against the State, when it encourages tax-evasion, is difficult to defend. Secondly, it is feared that the granting of loans would become a political question. But privately owned banks might refuse to supply credit according to the requirements of the State Plan. In such a case either the banks must be coerced or the plan would break down. Thirdly, it is objected that State banking would be less safe. "But this is sheer nonsense," says Cole.[26]

However, Cole thinks that the degree of control required for the purposes of planning can be secured without the socialisation of commercial banks.

CHAPTER XIV

FERNCH AND GERMAN CENTRAL BANKS

The study of the Bank of England and the London Money Market has given us an insight into the organisation of credit in a highly industrialised country. Briefer treatment must suffice for France and Germany.

THE BANK OF FRANCE

The Bank of France was established in Paris in 1800, with the First Consul as one of its stockholders. The capital amounted to 30,000,000 francs. In 1803 its capital was raised to 45,000,000 and the monopoly of note-issue was conferred upon it. In 1843 the direction of the Bank was transferred to a governor and two sub-governors to be nominated by the Chief of the State. The Bourbon Government in 1817 and 1818 had ordered the closing of the branches opened by the Bank of France, and established independent banks in three places, with the right of note issue. In 1848 the Provisional Government made all independent banks branches of the Bank of France. In the years which followed the area served directly by the Bank expanded and by 1914 the Bank had 142 branches, and in all 583 '*places bancables*.'

The Bank of France, unlike the Bank of England, has direct dealings with a large number of commercial customers, and for that purpose maintains branches in all important towns. It comes into direct competition with commercial banks.

The Bank of France is Government's banker. It has made large advances to the Government in the past. The permanent debt of the Government to the bank amounted to 200,000,000, francs in 1911, and to no less than 38,000,000,000 francs in July 1926. These advances were repaid in July 1926.

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[26] *Ibid.*, p. 200.

The Bank of France is owned by shareholders, but it is under Government control. The Governor and two Deputy Governors are appointed by the President of the French Republic, and the Government appoints 9 out of 20 Directors, 3 representing the Ministers of Finance, National Economy and Colonies, and the other six being ex-officio members holding certain appointments in State financial institutions.

Note-issue. Between 1870 and 1928 a legal maximum was prescribed for the note-issues, or there was no fixed relation of gold to the note-issue, as in the case of the Bank of England. The legal maximum was abandoned in 1928. The system provided no guarantee against inflation, as Parliament could raise the maximum to any figure.

The Federal Reserve Act of 1915 required the Federal Reserve Banks of the United States to hold a reserve of 35 per cent against deposits, compared with the 40 per cent reserve against notes. This legislation exercised a considerable influence on newly formed and also some of the older central banks. In France a 35 per cent reserve was to be maintained against deposits as well as notes. The reserve was to consist entirely of gold, and no provision was made for the suspension of reserve reqirements.

Rediscount. The Bank of France discounts bills carrying three signatures and makes advances against the deposit of French Government, colonial, municipal and other specified securities for 90 (or more) days.

Bills are often used in France in the settlement of business transactions.

Premium on Gold. An interesting device was employed by the Bank of France to check the outflow of gold—that of charging a premium on gold when gold was demanded in redemption of notes or deposits. This policy was first adopted in 1877. Thus a free gold market did not exist in France, as it existed in England before 1914. To check a foreign drain of gold the Bank rate was raised in England. France preferred more direct action. Dunbar says:

> " If Paris had maintained a free gold market, it would have experienced a far more considerable demand from foreign borrowers for short-time loans. On the assumption that such accommodation had been granted to the extent of many hundreds of millions of francs and to an increasing extent during the last twenty years or more, it is certain that gold would have been somewhat differently distributed throughout the world, a little less in France, a little more esewhere." [1]

If the Bank rate is to be raised, whenever there is apprehension of a foreign drain, changes in the Bank Rate would be frequent,

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1. *The Theory and History of Banking*, by C. F. Dunbar, p. 191.

and it may be necessary to raise the Bank rate sometimes to a fairly high level. The practice of discouraging the export of gold by charging a premium on it its delivery enabled France to enjoy the benefit of a low stable rate of discount for long periods. The premium policy, Dunbar thinks, was not out of accord 'with the business situation in France.' The population of France is thrifty and conservative in money matters and is not unduly stimulated by a low Bank rate. In London and Berlin, on the other hand, the policy of a low stable rate of discount, says Dunbar, "could hardly have been adopted with safety,"[2] in view of the enterprising spirit of the people.

Times have changed, for changes in the Bank of England Rate are now far less frequent than formerly.

The Bank of France. Figures in Francs (000,000's)

December 24th.

	Assets	*1937*	*1943*
1.	Gold Reserve (coin and ingots) ...	58,933	84,598
2.	Silver Coin and token money ...	378	287
3.	Postal Current Accounts ...	626	1,845
4.	Foreign Assets ...	919	37
5.	Domestic Bill portfolio ...	15,363	51,693
6.	Advances on Securities ...	3,693	2,848
7.	30-day advances on Treasury bonds maturing within 2 years ...	530	680
8.	Non-interest bearing loans to the State ...	3,290	10,000
9.	Provisional non-interest bearing advances to the State ...	26,909	391,151
10.	*Rentes* held for special purposes ...	113	113
11.	Other Assets ...	3,015	5,642
12.	Total Balance sheet ...	113,679	548,894
	Liabilities		
13.	Capital ...	183	183
14.	Reserve Funds ...	329	329
15.	Notes in circulation ...	91,263	497,759
16.	Creditors in current account ...	19,081	46,379
17.	Profit and loss accounts	119	227
19.	Other Liabilities ...	2,704	4,017
	Discount Rate	3%	1¾%

Notes : '4. Foreign assets' includes deposits with foreign central and other banks, foreign bills discounted to finance export trade, and temporary advances to foreign institutions.

'5. Domestic Bill portfolios,' includes agricultural bills rediscounted, bills rediscounted for peoples' banks, three months' Treasury bills etc.

'10. *Rentes*' are bonds of the French Government.

'16. Creditors in current account' includes the accounts of the Treasury, and other institutions.

2. THE REICHSBANK

The Bank of Prussia was transformed into the Bank of the Empire, or Reichsbank in 1875. At that time 32 other banks also enjoyed the right of note-issue. The exclusive right of issuing bank notes was given to them and to the Reichsbank, provision being made, as in the Bank Charter Act of 1844, for transferring to the Reichsbank any right of issue surrendered by any of the other banks. By 1893 there were only seven of these other banks of issue left; their note-issue was small as compared with that of the Reichsbank. In 1909 Reichsbank notes alone were made legal tender.

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[2] *Ibid.*, p. 192.

As in the Bank Charter Act of 1844, no limit was fixed for the aggregate circulation, but the fiduciary circulation was fixed at 385,000,000 marks. This total was divided among the banks of issue. Unlike the Bank Charter Act, the limit of fiduciary circulation could be exceeded by the payment of a graduated tax to Government on the excess issue. Thus the German note-issue was made elastic. This provision of the German Act of 1875 has been widely copied in other countries.

It may be incidentally noted that an elastic note currency was indispensable in Germany on account of the extensive use of bank notes in business transactions. The use of cheques as a means of payment was not so well developed in Germany as in England.

It was also provided in Germany that the cash held shall, in any case, amount to one-third of the notes.

Administration.—The Reichsbank, when established, was in everything, except ownership, a Government bank. The Board of Directors (Bank Directorium) was appointed by the Government: shareholders were only allowed to elect a committee with consultative powers. The Bank was banker to the Government and the Government shared in its profits.

Before the out-break of the first world war, the Reichsbank performed the usual duties of a central bank, including those of the lender of last resort (*der lettzen Kreditquelle des landes*)[3] The credit granted by the Reichsbank to the Government was relatively of small importance as compared with the assistance that it rendered to the business world. The situation changed with the outbreak of war in 1914. " The Reichsbank became War-bank " (" Die Reichsbank wurde zur Kriegsbank").[4] From 1,958 million marks in 1913 the note-circulation increased to 13,682 million marks in 1918. The cost of production of notes in 1918 amounted to about 13.6 million marks.

Worse was to come in the post-war years. The note circulation attained truly astronomical proportions and stood at 496.5 trillion marks on 31st December, 1923; the cost of production of notes in 1923 amounting to 32.8 trillion marks. Finally the mark was stabilized at the rate of 1 billion paper marks (1,000,000,000,000) to one gold mark (20 gold marks = 1 £).

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[3] *Die Reichsbank, 1901-1925,* a special Report issued by the Reichsbank, p. 39.

[4] *Ibid.*, p. 39.

The terrible experiences of Germany in the inflation period led to the freeing of the Reichsbank from Government control under the Banking Law of 1924. The official report on the operations of the Reichsbank covering the period 1901-1925 (*Die Reichsbank, 1901-1925*) says: "The complete independence of the Reichsbank from the Government has been expressly laid down in legislation." The Reichsbank Direktoruim alone became responsible for the affairs of the Reichsbank, and particularly for its currency, discount and credit policy. The State could no longer use the Bank for obtaining unlimited credit.

Having won its independence in 1924 the Reichsbank lost it again in 1937, when its constitution was amended, empowering the Fuehrer and Chancellor to nominate the President and other members of the Management Board. The Reichsbank passed completely under State control in that year.

Branches.—A peculiarity of both French and German banking systems is the large number of branches maintained by the Central banks of these countries. The Reichsbank, like the Bank of France, has a net work of offices and branches all over Germany (over 450 in number). The object of these branches is to provide facilities for the transfer of money from one part of the country to another, without the movement of cash. The Reichsbank promotes payments by transfer (what is called "Remittance" in India) free of cost not only for banks but also for members of the general public having current deposit ('*giro*') accounts with it. A small charge is made from those who do not have 'giro' accounts. The amount of the Reichsbank's transfer business (*giroverkehr*) is enormous.

3. BANK RATE CHANGES

Like the Bank of England the Reichsbank relied on a rise in the Bank rate for checking a foreign drain of gold.

About the middle of October 1907, the Reichsbank had raised the Bank Rate to 5½ per cent as a measure of credit restriction, in the expectation that no further enhancement would be necessary during the remaining part of the year. The financial crisis in New York, however, led to a considerable loss of gold by the Reichsbank, and the Bank Rate was raised to 6½ per cent on 29th October and to 7½ per cent on 8th November, 1907. These measures not only checked the export of gold, but caused an inflow of gold. In 1908 a Banking Inquiry Commission was appointed, which was to consider and report on, among other things, "the nature and application of the so-called premium-policy," as an alternative to changes in the Bank rate for regulating the inflow and outflow of gold. The Commission unanimously rejected the policy of charging a premium on the delivery of gold (*sogenannten Praemienpolitik*). It is interesting to note that the Commission was unanimously of the opinion that the main factor determining the inflow and outflow of gold was the country's balance of payments,

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Ibid., p. 28.

which was influenced only to a very limited extent by banking and currency policy (*die sich durch bankund Waehrungs-politische Massnahmen nur in sehr beschraenktem Umfange beeinflussen lasse*".[5] This is a point of some importance. The rise of the Bank rate has a direct and immediate effect on capital movements. The most important element in a country's balance of payments is the balance of trade, arising from the exports and imports of goods and services. The balance of trade is affected by credit policy, in as much as a restriction of credit would tend to lower prices, thus encouraging exports and discouraging imports of goods. But this is an effect which tends to be realised slowly and only by prolonged credit restriction.

Where reliance is placed not on a gold premium but fluctuations of the Bank rate for controlling gold movements, both the extent of the fluctuations and their frequency would be considerable. M. H. De Kock says:

"The Reichsbank followed the fluctuating rate policy of the Bank of England, with high rates at times, rather than the relatively uniform rate policy of the Bank of France. According to Loubet, the Reichsbank changed its discount rate 84 times between 1875 and 1900 compared with 167 in the case of the Bank of England and 25 in that of the Bank of France."[6]

The official report on the working of the Reichsbank from 1901 to 1925, which has been referred to above, gives an interesting Table (No. 47), showing the official rates of discount of the Reichsbank from 1876 to 1925, classified according to the frequency of their changes and the period of their duration.

Between 1876 and 1925 the total number of changes in the bank rate was 151, which may be classified thus :—

No. of changes	*Observed frequency*	*Calculated frequency*
1	4	4.1
2	6	6.7
3	12	11.2
4	6	10.3
5	6	5·6
6	4	2.1
7	3	.9
	41	40.9

Very Good Book

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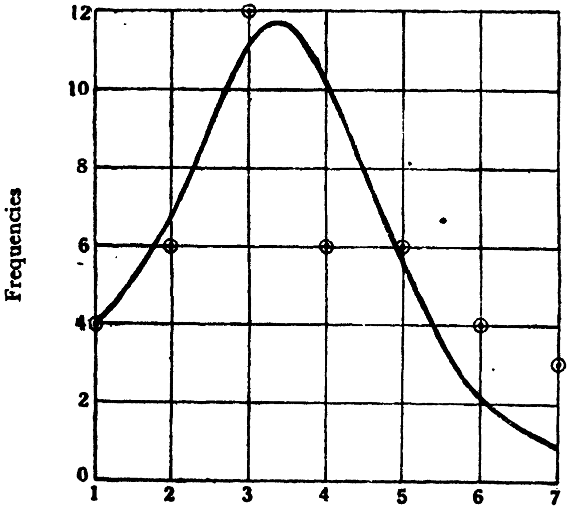
[5] *Ibid.*, p. 29.

[6] *Cental Banking*, p. 156.

To the observed frequencies we have fitted a frequency curve shown in Chart 13.



Number of Changes

CHART 13

Showing a curve fitted to the frequency of changes in the Discount Rate of the Reichsbank during 1876-1922.

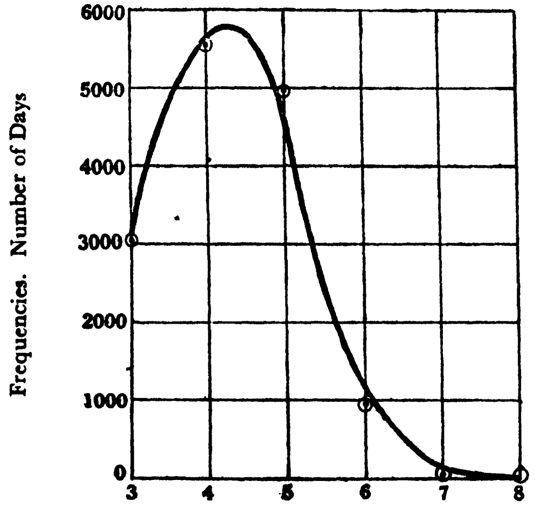
There were 7 changes in the Bank Rate in 1877, 1899 and 1905; the Bank Rate was changed six times in 1876, 1879, 1898 and 1908.

The classification of the rates of discount according to their period of duration yields the following decidedly interesting frequency distribution :—

Bank Rate per cent		*Observed frequencies or No. of days for which the bank rate was valid*	*Calculated frequencies*
3	...	3,037	3,125
4	...	5,583	5,670
5	...	4,960	4,584
6	...	935	1,132
7	...	80	126
8	...	52	10
		14,647	14,647

The fitted frequency curve is shown in Chart 14. The data are fairly regular and the " fit " may be considered reasonably good.

The present writer much regrets that data similar to those for the Reichsbank discount rates are not available to him for the discount rates of the Bank of England. The Bank of England's curve would also be positively skew with a longer stretch of the tail to the right than to the left, but the modal frequency would be different. A comparison of curves for the two Central banks would have been interesting.



Official Discount Rates of Reichsbank.

CHART 14

Showing the number of days for which the official discount rates of the Reichsbanks were valid during 1876-1922, and the fitted frequency curve.

Three reasons are given for the greater frequency of changes in the Bank of England's rate of discount as compared with those of the Reichsbank. First, London was the world's financial centre, and therefore more sensitive to disturbances in economic and financial conditions in any part of the world; second, her gold reserve was small as compared to the credit structure built on it; and third, British investments in undeveloped and semi-developed countries all over the world had often a tendency to subject Britain's capital and banking resources to pressure, necessitating control and management through the manipulation of the Bank Rate.

Decline in the frequency of changes in the Bank Rate.—Statistics of central bank discount rates, given in the League's *Money and Banking 1942-44*, show that there was no change in the central bank discount rate (quarterly averages) between 1938 and 1943 in the following countries :—

Argentine (3.5 per cent), Australia (4.25 per cent), Italy (4.5 per cent), Japan (3.29 per cent), Mexico (4.5 per cent).

The Reserve Bank of India began operations in 1935 with a Bank Rate of 3 per cent. The rate has remained unchanged since then.

In the United Kingdom the Bank Rate was 2 per cent in 1938; it was raised to 4 per cent on 24th August, 1939; lowered to 3 per cent on 28th September, 1939, and 2 per cent on October 26th, 1939. Since then the rate has remained unchanged.

For India, the explanation of an unchanging Bank Rate is simple—money conditions have been easy since the foundation of the Reserve Bank. It may also be remembered that the control of credit by the Reserve Bank of India has not the same importance in our country as in other countries, a point which is more fully discussed elsewhere in the book.

In England, and other countries, the importance of the Bank Rate as an instrument of credit control declined after the first world war. We have seen that the Bank Rate is not the only instrument; the central bank may bring about an expansion or contraction of credit by means of its open-market operations, keeping the Bank Rate unchanged. We have referred above to the finding of the German Banking Enquiry Commission of 1908 that currency and banking policy exercised a very limited influence on the balance of payments. This is particularly true of any restriction of credit caused by a rise in the Bank Rate alone. Suppose the Bank rate is Raised from 3 per cent to 3½ per cent and the change has a currency of a few days or weeks. The restriction of credit caused thereby will be very, very small as compared with the total amount of credit at the disposal of the business community, and the effect on prices, and, in consequence, on exports and imports, will be negligible. The long-run effect of a rise in the Bank Rate is certainly that described earlier in this book, but to have that effect credit restriction through the Bank Rate must be continued for a sufficiently extended period.

Open market operations have a more direct and powerful effect on the supply of credit than changes in the Bank rate by themselves.

Lastly, exchange-control and the control of gold movements is now a function of Exchange Equalisation or Stabilization Accounts. As we have seen, these Accounts are not merely concerned with ironing out exchange fluctuations but defending the external value of the currency unit. One of the main causes of the fluctuations in the Bank Rate in the past, the regulation of the inflow and outflow of gold, is no longer operative. Exchange may now be kept stable by the manipulation of the Exchange Equalisation Account, without any change in the Bank Rate.

4. GERMAN BANKING, 1933-38.

German banking experienced a complete collapse in 1931. Its reconstruction in 1934 by legislation led to the setting up of a credit Supervisory Board, consisting of the President and Vice-President of the Reichsbank, four Secretaries of State, a member appointed by the Chancellor, and a Reich Commissioner of Credit, with wide powers to control the activities of banks, particularly credit creation, and to regulate their reserves. Within prescribed limits the Board could vary their reserve ratios, or the minimum reserve requirements. The policy of the Board was effectively controlled by the Reichsbank, and thus the Act of December, 1934, placed the whole German banking system directly under the command of the Reichsbank.

5. RECONSTRUCTION FINANCE.

The Act of 1924 practically ruled out open-market operations, and it was only in 1933 that the Reichsbank obtained the right to buy and sell certain specified securities, and to include such securities as cover for the Bank's note-issue.

The Reichsbank and the commercial banks played a notable part in German recovery between 1933-1938. They provided credit for reconstruction which, combined with the public works programme of the Government, and rearmament expenditure, contributed to "full employment."

Under the Act of 1924 the Reichsbank could discount commercial bill without limit. When the public works programme was initiated, orders were given to firms engaged in the businesses concerned. The contractors drew bills which were accepted by special financing institutions created for the purpose, *e.g.*, the *Deutsche Gesellschaft fuer Oeffentliche Arbeiten* (German Company for Public Works). The bills accepted by the special financing institutions were discounted by the commercial banks, and they were re-discountable with the Reichsbank. The re-discounting of Employment Creation Bills, special and other bills by the Reichsbank had the effect of making abundant supplies of money available for reconstruction purposes and the Reichsbank only made an occasional use of its new power of conducting open-market operations with the object of regulating the money supply.

THE REICHSBANK. REICHSMARKS (000,000's)

	ASSETS.	*1937*	*1943*
1.	Gold	71	71
2.	Cash (subsidiary coins and notes of the Rentenbank)	119	529
3.	Balance with postal cheque offices	29	244
4.	Foreign Exchange	190	22
5.	Claims in R. M. on foreign correspondents.	8	2
6.	Domestic bill and cheque holdings	5,966	41,337
7.	Securities	404	66
8.	Loans against collateral	60	27
9.	Current advances to the Reich	43	629
10.	Claims due on balance from the Reich	94	781
11.	Other assets.	368	
12.	Total Balance sheet	7,352	43,708
	LIABILITIES.		
13.	Capital	150	150
14.	Reserves	514	960
15.	Notes in circulation	5,493	33,683
16.	*Giro* and Deposit accounts	1,059	8,186
17.	Due in foreign exchange	2	...
18.	Other liabilities	134	729
	Discount Rate %	4	3½

2. Notes of the 'Rentenbank' which were being gradually withdrawn according to the Rentenbank Law of 1924, were again issued by virtue of a decree of September 4th, 1939.

15. Notes in circulation do not include notes held as till money.

16. *Giro* accounts are currents accounts used for transfer payments.

CHAPTER XV

THE FEDERAL RESERVE SYSTEM

The Federal Reserve System was established in the United States in 1914 on the basis of the National Banking System, and the National Banking System was created in 1863-64 to replace free banking which had prevailed till then. We are in this chapter chiefly concerned with central banking in the United States, or the Federal Reserve System, but a brief reference to the earlier banking history of the country would not be out of place.

1. BANKING BEFORE 1863-64

Banking now signifies receiving money on deposit and making loans. In the 19th century and before, as we have already seen, it meant, principally, the right to issue notes. Notes were first issued in the United States by land-banks against the security of land. The notes tended to be over-issued and became inconvertible. Land is not a readily realisable asset. The first Land Bank was founded in 1686. The Land Banks were followed by State Banks, founded with the support of the State in which they were established. They issued notes and usually lent more than they borrowed, deposits being scarce.

The first Bank of the United States was founded in 1791 on the model of the Bank of England. Its notes were made legal tender, and it acted as the banker of the Government and the States. For twenty years it worked, successfully, but, on account of political opposition, its charter failed to be renewed in 1811. When it went into liquidation in 1812, the Bank met its obligations in full.

A second Bank of the United States was established in 1816. The Bank acted as Government banker, receiving and making payments on behalf of the Government and making loans to Government. Its notes were legal tender, the lowest denomination notes being of 5 dollars. Like the first Bank of the United States, the second Bank also encountered political opposition, and disappeared when its charter expired in 1836. It reappeared later in the same year as the United States Bank of Pennsylvania, to disappear finally in 1841 as the consequence of a run upon it by its note-holders.

Metallic money was scarce, and the demand for currency was met by notes issued by an ever-growing number of local banks. Some of these banks endeavoured to keep adequate reserves of specie to maintain the convertibility of their notes; others issued notes without restriction, which led to the depreciation of the notes.

2. THE NATIONAL BANKS OF THE UNITED STATES

It was first in 1861 that the Secretary of the United States Treasury submitted a plan to the Congress with the object of strengthening note circulation by a national system of secured bank issues. He preferred properly secured bank issues to an increase in the issue of Government notes, which involved 'the risk of a depreciated, depreciating and finally worthless paper money.' By legislation enacted in 1863-64, a system of national banks was organised with the object of providing a national currency; Government legal tender notes were to be eventually withdrawn. The right of note-issue was restricted to national banks, the other functions of banking being left free to State banks and private banks. Any national bank, proposing to issue notes, was required to secure them by a deposit of registered bonds of the United States. These bonds had to be deposited with the Treasurer at Washington, but remained the property of the national bank concerned, which also received the due interest on the bonds. A national bank could issue notes to the amount of 90 per cent of the market value of the bonds deposited; the limit was raised in 1900 to 100 per cent of the par value of the bonds. The notes were to be paid by the issuing bank whenever presented for encashment. They were never made legal tender as between individuals, but were to be received in payment by all other national banks, and could be paid to and received in payments from the Government. In 1874 every national bank was required to maintain in the Government Treasury a reserve equal to 5 per cent of its circulation for the redemption of the notes, and the United States Treasury became the sole redeeming agency for all the national banks. The Government thus undertook to pay on demand all notes when presented in due form, and not merely notes to the extent of the reserve. In case of a bank failure, the law provided for the immediate redemption of all its notes at the Treasury.

The Treasury possessed ample security against the notes. First, it held the bonds against which the notes had been issued; this deposit was to be increased if the value of the bonds declined. Secondly, a reserve of cash was held by the Treasury. Thirdly, the Treasury enjoyed a first *lien* upon all the assets of the issuing bank and upon the personal liability of the stock-holders, for making good any possible deficiency in the security already provided. The cost of printing the notes was recovered by a tax of one per cent per annum on the average amount of notes in circulation, reduced to ½ per cent in 1900. The profit from the destruction of any notes while outstanding, or from the failure of the holders to call for their conversion, also belonged to the Government.

The banks found a double source of profits in issuing the notes. They earned interest on the bonds by which the notes were secured, and interest on the loans which they made in notes.

The note circulation at the end of 1881 reached its peak, 325 million dollars. Thereafter it declined steadily from year to year till 1891, when it amounted to only 123 million dollars. The circulation was reduced by the repayment of the National Debt and the rise of national credit, which lowered the yield of bonds and made them less attractive to the banks as investment. In 1900 the greater part of the funded debt was refunded into two per cent bonds. Upon notes secured by the new bonds the tax on circulation was reduced from one to ½ per cent. Thus the profit from the issue of notes was slightly increased, and the note circulation began to expand. In 1912 the total value of notes in circulation was 722 million dollars but the principles of note-issue were not altered by the Act of 1900. The aggregate circulation depended on the market value of bonds and the circulation rose or fell with the current price of bonds. There was no expansion or contraction of the circulation in accordance with the needs of trade.

State banks or any other banks which did not enter the National Banking System paid a tax of 10 per cent on their issues.

3. RESERVE AGAINST DEPOSITS

Under the National Bank Act of 1863, revised in 1864, national banks were divided into three classes, those in (1) central reserve cities, (2) reserve cities and (3) other towns. There were three central reserve cities originally, New York, Chicago and St. Louis. National banks of these three cities were required to keep a reserve of 25 per cent in their own vaults. National banks of the second category were also required to keep a minimum reserve of 25 per cent of their deposits, but one half of it could be kept with banks in central reserve cities. For banks in other towns, the minimum was 15 per cent, of which three-fifths could be kept with national banks of the first two categories.

Under such a system there can be no centralization of reserves as when there is a Central bank. The reserves were scattered throughout the country, but they took a pyramidal form. This system of reserve keeping was profitable for banks of the second and third categories, as, instead of holding 15 per cent or 25 per cent of deposits in the form of gold in their own vaults, they could keep a part elsewhere as a deposit credit which earned interest. The country and reserve city banks generally maintained excess reserves in their correspondent banks, and since reserve city banks were permitted to keep as much as half of their minimum legal reserves with the central reserve city banks, there was a concentration of reserves in the latter, particularly New York. On January 13, 1914 national banks in New York held as reserve in their vaults, in specie and legal tender notes, a sum of 313,600,000 dollars as compared with only 89,000,000 dollars held by Chicago, which came next.

4. USE OF BANK BALANCES

The New York banks were eager to acquire outside bank balances, for they could make a very profitable use of them. They competed among themselves for these balances, allowing 2 per cent interest on them, as they were able to earn much more by lending them, in the form of call loans, to speculators on the New York Stock Exchange. On the stock exchanges in Europe, transactions were settled by cash payments once or twice a month, (in India the rule is fortnightly settlements). But on the New York Stock Exchange there was a daily settlement system, and there was a keen demand for loans. The Stock Exchange thus provided an exceedingly profitable outlet for the bankers' balances in New York.

It can be easily understood that when surplus funds are largely employed to finance stock exchange speculation, they may not be available when required for another purpose. When the panic of 1907 occurred, which had financial repercussions also on India, the Boston Banks had 25 million to 30 million dollars of deposits in New York banks subject to cheque. When the Boston banks wanted the money, it was not available. Thus the liquidity of the money market was determined by the stock-market. The money-market was liquid when the stock market was dull, and it was tight when there was activity in the stock market.

The seasonal demand for money for financing the movement of crops caused a wide variation in interest rates. When money had to be sent from New York to the agricultural communities, the loans to stock exchange speculators had to be recalled.

No Rediscount Market.—Banks invested money in commercial paper, but that meant locking up funds until the bills matured. There was no central institution to provide re-discount facilities. And any bank which endeavoured to increase its liquidity by re-selling the commercial paper held by it to another bank lost credit and excited distrust.

The financing of foreign trade.—American foreign trade was financed in those days as our foreign trade has been always financed, through London. American banks possessed few branches abroad. The rise of money rates in New York exercised little influence on gold movements, again a situation similar to that of India.

The Independent Treasury System. Again like India, the United States had also an Independent Treasury system, established in 1846. The Govrenment kept its surplus money in its own custody, and did not entrust it to banks. The Treasury insisted on receiving its obligations in cash and making payments in cash. The money kept in Government Treasuries in Washington and elsewhere was effectively segregated from the banking system, and Government cash receipts and payments added to the difficulties of the money market.

Credit control.—The number of commercial banks in the country in 1913 was 25,000. These banks were independent institutions, each working for profit, and therefore in keen competition with the rest. There was no central authority to co-ordinate their policies or to regulate and control their operations. In a panic a bank could strengthen itself only by weakening a rival.

5. CONTRAST WITH EUROPE

American banking methods, before the establishment of the Federal Reserve System of banking, were, it will be seen, the opposite of European banking methods.

1. Banking reserves, in Europe were centralised in an apex institution, the Central Bank. In U. S. A., they were decentralised, but had a pyramidal form, with concentration in New York banks.

2. Note-issue was centralised in Europe. In U. S. A. notes were issued by 6,500 banks.

3. The total supply of money in Europe was highly elastic, varying according to the needs of trade. In U. S. A. the liquidity of the money market depended on the conditions in the stock market.

4. The bill of exchange was the chief quickest asset of bankers in Europe; in U. S. A. call loans on stock exchange collateral performed that function.

5. Europe had developed a widely spread system of branch banking. The U. S. A. preferred small independent banks, about 25,000 in number.

6. Europe had a system of monthly or fortnightly settlement of stock exchange transactions. The U. S. A. maintained daily settlements.

7. The bill of exchange had become a means of exchange in Europe, thanks to rediscount facilities. In U. S. A. it was a means of investment, an investment which amounted to a locking up of cash in unsalable assets.

Central Banks in Europe were ready to buy bills of exchange endorsed by bankers, or bills with bankers' acceptances. When more commercial paper was bought by a central bank, notes were issued and the supply of money thus increased. When the central bank reduced its purchases of commercial paper, and collected the value of the bills previously purchased by it, on maturity, the supply of money contracted. The bank rate was thus used as an effective instrument for regulating the price of credit, and controlling its supply, which fluctuated according to the requirements of trade. All this was unknown in the United States.

It is also obvious that American banks would have the greatest difficulty in meeting a run. Excess reserves were concentrated in New York banks, which employed their balances to finance the stock market. The bills held by the banks were not quick assets, being unsalable. A run could be met only by the withdrawal of money from the stock market. The slightest scare might thus develop into a general panic involving liquidation on a gigantic scale.

It may not be uninteresting to learn how panics were dealt with in England. Long ago Bagehot wrote :—

"The difficulty is this: if the Bank decline to discount, the holders of the bills previously discounted cannot pay. As has been shown, trade in England is largely carried on with borrowed money. If you propose greatly to reduce that amount, you will cause many failures unless you can pour in from elsewhere some equivalent amount of new money. But in a panic there is no new money to be had; everybody who has it clings to it, and will not part with it. Especially what has been advanced to merchants cannot easily be recovered; they are under immense liabilities, and they will not give back a penny which they imagine that even possibly they may need to discharge those liabilities. And bankers are in even greater terror. In a panic they will not discount a host of new bills; they are engrossed with their own liabilities and those of their own customers, and do not care for those of others. The notion that the Bank of England can stop discounting in a panic, and so obtain fresh money, is a delusion."

There was a panic in the London money market in 1825. At first the Bank of England hesitated and blundered. But when it adopted what Bagehot calls 'the right principles' for dealing with panics, it adopted them completely.[1]

According to the official statement, " We," that is, the Bank directors, 'lent money by every possible means, and in modes which we had never adopted before; we took in stock on security, we purchased Exchequer Bills, we made advances on Exchequer Bills, we not only discounted outright, but we made advances on deposits of bills of Exchange to an immense amount, in short, by every possible means consistent with the safety of the Bank.' And for the complete and courageous adoption of this policy at the last moment the directors of the Bank of England at that time deserve great praise, for the subject was then less understood even than it is now."[2]

The 'Advertisement' to *Lombard Street*, written by Bagehot, is dated April 26,1873. As far back as 1873, at any rate, if not 50 years earlier, the London money market not only knew the 'right principles' of dealing with panics, but possessed the right mechanism for the application of those principles.

Individualism.—The American banking system before 1914 was "cruel" and "inefficient." It was based on extreme individualism. Every banker wanted to be free or independent. Central control was intensely disliked, as it was feared it would mean one of two things, complete Government control signifying "politics in banking" or control by " Wall street," signifying " banking in politics." The national banking system had been deliberately devised to decentralize banking. But the system had outlived its usefulness. The economic development of the United States had turned the whole country into one economic organism; exchanges of goods and funds had been established between different parts of the country on the one hand and the United States and the outside world on the other. Individualistic banking was not suited to the new trends of economic development.

Paul M. Warburg, a banker trained in European centralised methods of banking, arrived in the United States in 1903. He had become a junior partner in an American banking firm; in 1914 he joined the Federal Reserve Board. It struck him on his arrival that the American banking system was wrong ‘from top to bottom,’ and he prepared a memorandum suggesting its reform on European lines. So strong was the prejudice in the United States against centralised control of banking that Warburg was warned by the senior partner of his firm not to let his views be generally known, for the advocacy of central banking methods would impair his standing in the banking community. Warburg himself tells the story of how Mr. J. A. Stillman, President of the National City Bank of New York, reacted to his memorandum. ‘Leave things alone,’ was Mr. Stillman’s advice to ‘the great international financier.’ Had not the City Bank done quite well ? Warburg said ‘yes,’ but added that Stillman’s bank was so big and powerful that when the next panic came he would wish that his responsibilities were smaller. The words were prophetic. Four years later, in the panic of 1907, it was Mr. Stillman who wished to read Warburg’s memorandum again. Warburg said, ‘Too late now, Mr. Stillman; what has to be done cannot be done in a hurry. If reform is to be secured, it will take years of educational work to bring it about.”[3]

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[1] *Lombard Street*, pp. 191-92.

[2] Bagehot, p, 204.

6. THE FEDERAL RESERVE ACT AND THE ALDRICH BILL

The Federal Reserve Act was signed by President Wilson on December 23, 1913. The Federal Reserve Board took the oath of office in August 1914, and in November of the same year the Federal Reserve Banks opened.

The country was divided into 12 districts, each of which was to contain a Federal Reserve city, with a Federal Reserve Bank. The 12 Federal Reserve cities were, Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St.Louis, Minneapolis, Kansas City, Dallas and San Francisco ; of these New York, Chicago and St. Louis were defined as Central Reserve Cities. In 1923, St. Louis was dropped from the list, and since then New York and Chicago have been the only two Central Reserve Cities.

Every National bank within the District in which a Federal Bank was established was required to subscribe to the capital stock of the latter a sum equal to 6 per cent of the paid-up capital stock of the Federal Reserve Bank. One-sixth of the subscription was payable on call of the organization committee of the Federal Reserve Bank, one-sixth within three months and one-sixth within six months thereafter.

The remainder, one half of the subscription, was to be subject to call when and as deemed necessary by the Federal Reserve Board. The payment of subscription was to be made in gold or gold certificates.

The capital stock of each Federal Reserve Bank was divided into shares of 100 dollars each. The capital stock could be increased from time to time as member banks increased their capital stock or as additional banks became members. No Federal Reserve Bank was permitted to commence business with a subscribed capital of less than four million dollars. No individual or corporation, other than a member bank, was allowed to hold at any time more than 25,000 dollars worth of stock (par value) in any Federal Reserve Bank. Voting power was conferred only on stock held by member banks.

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[3] *The Federal Reserve system*, Vol. I, pp. 18-19.

If subscriptions by banks and individuals were insufficient in any case, the deficiency was to be made good by the United States Government. In such a case the Secretary of the Treasury was to hold the stock which he might dispose of later " for the benefit of the United States " at a price not less than par, in a manner determined by himself.

Boards of Directors.—The boards of directors of the Federal Reserve Banks consist of nine members and hold office for three years. The directors are divided into three classes, (*A*) three members representing the stock-holding banks, (*B*) three members actively engaged in their district in commerce, agriculture or some other industrial pursuit, and (*C*) three members appointed by the Federal Reserve Board. No director of Class (*B*) can be an officer, director, or employee of any Bank, and no director of class (*C*) can be an officer, director, employee or stock-holder of any bank. The three directors appointed by the Federal Reserve Board must be residents of the district for which they are appointed. One of them " a person of tested banking experience " is chairman of the board of directors of the Federal Reserve Bank, and is called Federal Reserve Agent. His duty is to make regular reports to the Federal Reserve Board. Another director of Class (*C*), also a person of tested banking experience, acts as deputy chairman of the board of directors of the Federal Reserve Bank.

The Federal Reserve Board.—The Federal Reserve Act provided for a Federal Reserve Board with seven members (increased to eight later). Of the eight members of the Board the Secretary of the Treasury and the Comptroller of Currency are ex-officio members. The remaining six members are appointed by the President of the United States in consultation with the Senate. Not more than one of these members can be selected from any one Federal Reserve District. In making his selection the President has due regard to a fair respresentation of the different commercial, industrial and geographical divisions of the country. The six members of the Board devote their entire time to the business of the Board. The members of the Board are ineligible during the time they are in office, and for two years thereafter, to hold any office, position or employment in any member bank. Of the members appointed by the President, at least two must be persons experienced in banking or finance. The Governor of the Federal Reserve Board is one of these six members ; he is the active executive officer of the Board, under the supervision of the Board. It was laid down in the Act that (Section 4) " No senator or representative in Congress shall be a member of the Federal Reserve Board or an officer or a director of a Federal Reserve Bank."

Powers of the Federal Reserve Board.—The Federal Reserve Board is empowered among other things :

(1) To examine at its discretion the accounts, books and affairs of each Federal Reserve Bank and of each member bank and to require such statements and reports as it may deem necessary. The Board under the Act publishes once each week a statement showing the condition of each Federal Reserve Bank and a consolidated statements for all Federal Reserve Banks.

(2) To permit, or require Federal Reserve Banks to rediscount the discounted paper of other Federal Reserve Banks at rates of interest to be fixed by the Federal Reserve Board.

(3) To suspend the reserve requirements specified in the Act, the suspension being for a period not exceeding 30 days subject to renewal for periods not exceeding 15 days. When the gold reserve held against Federal reserve notes falls below 40 per cent the Federal Reserve Board is required to establish a graduated tax not more than one per cent per annum upon such deficiency until the reserve falls to 32½ per cent, and at higher rates thereafter. The tax is paid by the reserve banks, but the reserve banks are required to add an amount equal to the tax to the rates of interest and discount fixed by the Federal Reserve Board.

(4) To supervise and regulate the issue and retirement of the Federal Reserve notes.

(5) To exercise general supervision over the Federal Reserve Banks.

(6) To add to the number of cities classfied as reserve and central reserve cities or to reclassify existing reserve and central reserve cities, or to terminate their designation as such.

(7) To suspend or remove any officer or director of any Federal Reserve Bank.

(8) To require the writing off of doubtful or worthless assets upon the books and balance sheets of Federal Reserve Banks.

Dividends.—The stock-holders of the Federal Reserve Banks are entitled to receive a cumulative annual dividend of six per cent on the paid-in capital stock. Excess net earnings are paid to the United States as franchise tax, except that one half of such net earnings of each Federal Reserve Bank are accumulated in a separate fund.

Right to suspend members from use of privileges.—When a member bank fails to comply with the regulations of the Federal Reserve Board, the latter may require the bank concerned to surrender its stock in the Federal Reserve Banks and suspend it from further privileges of membership.

Sole Depositors.—A Federal Reserve Bank receives deposits only from the Government and from its member banks.

Rediscount Powers. —Upon the endorsement of any of its member banks any Federal Reserve Bank may discount notes, drafts, and bills of exchange arising out of actual commercial transactions; *i.e.*, notes, drafts and bills of exchange issued or drawn for agricultural, industrial or commercial purposes. The Federal Reserve Board has the right to determine or define the character of the paper thus eligible for discount. Eligible paper shall not include notes, or drafts or bills covering merely investments, or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the Government of the United States. Notes, draft and bills admitted to discount must be of 90 days' maturity, but they may have a maturity not exceeding six months when drawn or issued for agricultural purposes. Except in specified cases, the aggregate of notes and bills rediscounted by any one bank shall at no time exceed 10 per cent of the capital and surplus stock of a Federal Reserve Bank.

Fixing of Discount Rates.—In view of a controversy which arose later, Section 14 of the Act relating to the fixing of discount rates deserves special attention :

"Section 14. Every Federal Reserve Bank shall have power to establish from time to time, subject to review and determination of the Federal Reserve Board, rates of discount to be charged by the Federal Reserve Bank for each class of paper, which shall be fixed with a view of accommodating commerce and business."

There is a division of authority in the fixing of discount rates. The rates are originally fixed by the Federal Reserve Banks, but the Federal Reserve Board may not only review but "determine" them. The initiative rates with the 12 autonomous Federal Reserve Banks, but the Federal Reserve Board has also a voice in the matter. The Chicago incident, discussed later, led to contradictory interpretations of this rule.

Power for National Banks to make "acceptances."—Any member bank may accept drafts or bills of exchange drawn upon it and growing out of transactions involving the importation or exportation of goods having not more than six months' sight to run; but no bank shall accept such bills to an amount equal at any time in the aggregate to more than one half of its paid-up capital stock and surplus.

Power to purchase (or discount) acceptances.—Any Federal Reserve Bank may discount acceptances which are based on the importation or exportation of goods and which have a maturity of not more than three months and which are endorsed by at least one member bank. The limit of acceptances so discounted shall be the same as stated above.

Investments in U. S. Bonds and other Securities.—Every Federal Reserve Bank may buy and sell, at home or abroad, bonds and notes of the United States, and bills and notes, revenue bonds and warrants with a maturity of not exceeding six months, issued in anticipation of the collection of taxes, etc.

Power to deal in Gold and Bullion.—Every Federal Reserve Bank may deal in gold coin and bullion at home or abroad, make loans thereon, exchange Federal reserve notes for gold, gold coin or gold certificates, and take loans of gold coin or gold against specified security.

Open Market Purchases.—Any Federal Reserve Bank may purchase and sell in the open market, at home or abroad, either from or to domestic or foreign banks, firms, corporations, or individuals, cable transfers and bankers' acceptances, and bills of exchange eligible for rediscount with or without the endorsement of a member bank. Every Federal Reserve Bank may also purchase from member banks and sell with or without its endorsement, bills of exchange arising out of specified commercial transactions.

Reserves.—The act reduced the legal reserve percentage requirements of national banks. A distinction was made between time deposits, and demand deposits. Demand deposits were such as were payable within thirty days (in India within 24 hours), and time deposits were defined as all deposits payable after thirty days. Against time deposits a reserve of 5 per cent was prescribed for all the three classes of banks. Previously the reserve requirements for time and demand deposits were identical. In regard to demand deposits, the reduction in reserve requirements was from 25 per cent to 18 per cent for central reserve city banks, from 25 per cent to 15 per cent for reserve city banks, and from 15 per cent to 12 per cent for country banks. On opening, central reserve city banks were required to deposit an amount equal to 7 per cent of their own demand deposits, reserve city banks a preliminary deposit of 3 per cent and country banks 2 per cent. In 1917, however, the reserve requirements were altered. The reserve balances of banks in central reserve cities were increased from 7 to 13 per cent of demand deposits, of banks in reserve cities from 6 to 10 per cent, and of country banks from 5 to 7 per cent, together with a balance for all classes of banks of 3 per cent of time deposits. In July 1917 the reserve balances on deposit stood at more than 1,100, 000,000 dollars.

Note-Issue and Reserves.—A Federal Reserve Bank may, on the deposit of U. S. bonds at the Treasury, obtain notes in blank equal in amount to the par value of the bonds so deposited. These Federal Reserve Bank notes shall be the obligation of the Federal Reserve bank procuring them. The Act also provides that Federal Reserve notes are to be issued at the discretion of the Federal Reserve Board to Federal Reserve Banks through the Federal Agents appointed for the purpose. Such notes are an obligation of the U. S. Treasury, and are receivable by all National banks and other banks as currency, and for all taxes and other public dues.

Every Federal Reserve Bank is required to maintain reserves in gold of not less than 40 per cent against its Federal Reserve notes in actual circulation, and reserves in gold or lawful money of not less than 35 per cent against its deposits. As we have already seen, the reserves held against the note-issue may be allowed to fall below 40 per cent on the payment of a graduated tax upon the excess issue.

Federal Advisory Council.—In addition to the Federal Reserve Board, provision was made, for the purposes of co-ordination, for a Federal Advisory Council consisting of not less than 12 members, one for each Federal reserve district. The board of directors of each Federal Reserve Bank selects annually from its own Federal reserve district one member of the Federal Advisory Council. The Council meets at Washington not less than four times during a year to confer with the Federal Reserve Board on general business conditions and the working of the Federal Reserve system.

Branch offices.—The Federal Reserve Board may sanction or require any Federal Reserve Bank to establish branches within the Federal Reserve district in which the Federal Reserve Bank is located.

Foreign correspondents or Agencies.—Every Federal Reserve Bank has power to open and maintain banking accounts in foreign countries, appoint correspondents and establish agencies in such countries.

Such is the story of the modernisation of the American banking system. The banking reserves of the country were centralised, not in one but 12 central banks. The note-issues of the National banks were limited to the outstanding amounts of Government bonds against which those notes had been issued. When these bonds were redeemed in 1935-36, National bank note-issues lapsed Some old Government issues are still in circulation, but their amount is strictly limited, and for all practical purposes the Federal Reserve System enjoys a monopoly of note-issue. The money supply has been rendered elastic by the provisions of the Act relating to rediscounts and open-market operations.

Dunbar says : "While the Reserve Act was passing through Congress, many bankers favoured a Central Bank with branches. Happily, the plan of a decentralised system was adopted."[4] The Federal Reserve banks enjoy a large measure of independence and they are managed by local people. The idea of the Act was to combine the advantages of independent banking with those of a centralised system, and the plan adopted was of the nature of a compromise.

The Aldrich Bill.—The National Monetary Commission headed by Senator Aldrich had prepared a totally different plan in 1911. This plan, known as the Aldrich bill, provided for only one Central Bank with 15 branches for the whole of United States. Thus the entire gold reserves of the country would have been kept in the vaults of a single Central Bank. The Aldrich bill also provided for a uniform rate of discount for the whole country. There are other points of difference between the Aldrich Plan and the Federal Reserve Act. The Aldrich Plan was not accepted chiefly because

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4. *Loc. Cit.*, p. 258.

it was thought that too much power would be concentrated in the hands of a single institution. The bank, it was feared, would become the financial dictator of the United States. There were also advantages in having 12 regional banks adapted to local requirements, conversant with local conditions, and under local management.

7. THE CHICAGO INCIDENT

In 1927 the Federal Reserve Board established a new discount rate for the Chicago Bank before the directors of that Bank had submitted its rate " for review and determination." Had the Board power to do so ? The disagreement between the Board and the Chicago Bank threatened to lead to a judicial decision on the question. Eventually both parties thought better of that course. For a definite clear-cut verdict would have either made the Board the final authority in the determination of discount rates, thus depriving the Federal Reserve Banks of their much valued autonomy, or the Board would have been deprived of the power of enforcing a common discount policy even when it was most essential in the interest of the country.

Three framers of the Federal Reserve Act published statements on the matter in dispute.

Senator Owen was emphatically of the opinion that the Federal Reserve Board had power to fix the rates. He claimed that such was the intention of the Act, and added that if there was any doubt about it, the Act should be amended to remove the doubt.

Senator Glass, on the contrary, argued that the obvious spirit of the Act was to confide to each Federal Reserve Bank initial authority to establish rates. The Banks possessed superior knowledge of conditions of their locality. Neither the spirit nor the text of the Act sanctioned interference, except in extraordinary circumstances. If interference were permitted, the Federal Reserve Board would become a Central Bank and the Reserve Banks its branches. That was not the real intention of the law. If there was any doubt about it, the doubt, he said, should be promptly removed by legislation.

Dr. Willis expressed himself thus in the *New York Sun* :

" Local reserve banks cannot afford to give up this autonomy. Were they to do so, they would become nothing more than branches of the central organisation, or at times they might be really branches of other banks, which had succeeded in acquiring a dominating power in Washington. That is the danger at the present time."

The Chicago incident brings out the essential difference between European and American central banking of those days. The Federal Reserve System was a sort of decentralised system of central banking in which the regional institutions tenaciously clung to their autonomy. The system possessed no single will. At any time conflicts might arise within the system weakening and even disrupting it, What was the objection to endowing the Federal Reserve System with the powers of a Central Bank, with a will of its own and the means to enforce it ? It was feared that business would pass under the control of Government, and this was not acceptable to the democratic citizens of the United States.

Speaking on March 7, 1929, before the New York Stock Exchange crash of that year, Warburg described the machinery governing the steering apparatus of the Federal Reserve System as " too complicated to be either safe or efficient." Referring to the steering of the ' Zeppelin ' by Dr. Eckener, Warburg said : ' Had his manoeuvers been dependent upon the directions of 120 men, acting through twelve separate boards of directors, and operating ' subject to the review and determination ' of a central board of eight men, who may be wide apart in their views and bewildered by political influences and attacks, his ship would have been wrecked."[5]

The lack of unitary direction was a serious defect of the Federal Reserve System, and when the ' Zeppelin ' of American business encountered heavy weather in the crisis of 1929, the result was a disaster of unparalled magnitude. The disaster might have been avoided by prompt and resolute action on the part of a united Central Board.

8. THE CRISIS OF 1929

Authoritative figures show that between 1926 and 1929, prices were rising very slowly in the United States. Taking prices in 1926 as 100, the index number rose to 103 in 1928 and 105 in 1929. There was a slight reduction in the quantity of money in circulation (3 per cent in 1928 and 1929 ; 1926 = 100) and a small increase in the amount of deposits subject to cheque (4 per cent in 1928 and 3 per cent in 1929 ; 1926 = 100). The clearing index of business, prepared by the Federal Reserve Bank of New York, rose from 100 in 1926 to 102 in 1928, and 106 in 1929, while industrial production, after *falling* by 2 per cent. in 1927 (1926 = 100) rose to 103 in 1928 and 110 in 1929.

These figures do not show any sensational growth of business activity. And yet, in spite of almost stationary prices, and on the basis of a slowly expanding industrial production, business profits in the United States were increasing at an abnormal rate.

The increase of business profits was due to the fall in costs of production made possible by technical progress ; wages did not rise much.

The very high profits earned in the automobile industry led to over-investment in that field, " and the capacity of the industry reached the most amazing proportions."

With the growth of industrial profits speculation grew and prices of industrial stocks leapt up. Kemmerer thus describes the situation[6] :—

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5. *The Federal Reserve System*, Vol. I, p. 823.
6. *Facing the Facts*, p. 7.

" Prices of stocks on our exchanges rose to figures out of all proportion to the earnings, actual or prospective, of the respective companies. . . From September 1924 to September 1929 the mean of the monthly high and low daily average of prices of 351 industrial stocks, as given by the Standard Statistics Company, rose from 70.7 to 216, and for 33 railroad stocks from 79.3 to 168.1. The volume of monthly sales on the New York stock exchange increased during the same period from 18 million shares to 100 million shares."

It may be noted that the boom in the United States was rather a typical investment boom than a consumption boom. The increase in the production of articles of consumption such as leather goods, shoes and textiles was much less than that in the production of iron and steel. The consumption of food products remained unchanged.

In the second half of 1927 the Federal Reserve System had deliberately adopted a cheap money policy. The rates of discount had been lowered to 3 1/2 per cent and Government securities had been purchased on a large scale. The idea was to aid European countries, particularly Great Britain, in their efforts to restore the gold standard. In 1924-25 the Bank rate was raised in England to prepare the way for England's return to the gold standard, and the lowering of the discount rates by the Federal Reserve authorities showed that they were willing to co-operate. From 1925 to 1928 the United States lost 422 million dollars worth of gold.

Lower interest rates, apart from driving out gold, also encouraged stock exchange speculation. Irving Fisher says:

" In a word we dismissed some of our gold foundation and at the same time built a debt structure over the place where the gold had been. Billions of debts and a gold base that was slippery—these two conditions had now set the stage for the collapse of 1929."

Prompt and effective action should have been taken by the Federal Reserve authorities as soon as it appeared that the lower interest rates were encouraging stock exchange speculation unduly. Unhealthy and disquieting symptoms were observed at the end of 1927, and in the first months of 1928 the Federal Reserve System did try to reverse its policy. The holdings of Government bonds, which had been acquired through recent open market operations, were resold. But the policy of restricting credit was not carried out with sufficient vigour and determination. The idea was not to do anything which might hurt business. Three increases of discount rates took place in 1928, from 3 1/2 to 4 per cent, 4 1/2 per cent and 5 per cent (July 1928). But their psychological effect was weakened by statements made by responsible men to the effect that the volume of stock exchange loans was not unduly high, that business conditions were excellent, and that there was no ground for nervousness.

A 5 per cent rate was difficult to understand when call money varied from 7 to 25 per cent; when first rate commercial paper was selling at 6 per cent and over, and when the Government was borrowing money for short periods at a substantially higher rate than 5 per cent. It is not surprising that at 5 per cent the Reserve Banks would attract a very considerable amount of paper for rediscount, considering the high price of money throughout the country. From about 500 million dollars in 1925, 1926 and 1927, the rediscounts by the Federal Reserve Banks increased to about one billion dollars from the middle of 1928 until the collapse of October 1929.

A warning was issued by the Federal Reserve Board on February 7th, 1929, and a second warning on April 2nd, 1929. It was stated that an undue proportion of the country's credit supply was being employed for speculative purposes. The warings had only a temporary effect in checking the growth of stock exchange loans. During about two years, from the middle of 1927, stock exchange loans had increased by about 2 1/2 billion dollars. Assisted by stock exchange loans, speculative buying of securities led to an enormous inflation of stock exchange values, which bore no relation to the productive capacity of the enterprises concerned.

On May 21st, 1929, the Advisory Council recommended to the Federal Reserve Board an increase in the prevailing discount rates to 6 per cent. The Board made no change in the rates, but published the resolution of the Advisory Council.

At the end of May, 1929, the Stock exchange turned bearish. If, at this time, a quiet and controlled liquidation had been brought about, the flood of disaster in October might have been avoided. But New York banks helped the stock exchange to recover its buoyant enthusiasm.

The loans to stock exchange brokers increased further, demand for stock exchange securities was stimulated, and their prices soared again.

"The Board" says Warburg "in these fateful months sat still." It was not until August 9th, 1929, that the Board permitted the New York Reserve Bank to raise its rate to 6 per cent. This was accompanied by a decrease in the Federal Reserve System's open market rates, and the 5 per cent rate remained in force in all other districts. Obviously that was not the way to check inflation. At the critical moment, when stern and decisive action was needed, we find the Federal Reserve Board divided within itself, and in disagreement with the Federal Reserve Banks and the Advisory Council.

When the crash came millions were ruined. Between June 1929 and June 1932, the prices of 351 industrial stocks fell from 191 to 34 (1926 = 100), of 33 railroad stocks from 145 to 14, and of 37 public utility stocks from 233 to 55.

The stock exchange panic had a lesson for the administration of the Federal Reserve System. A Board was wanted which could act promptly in a crisis, and whose authority in framing a banking policy would be unquestioned.

9. TIGHTENING OF CONTROL

Following another banking crisis in 1933, marked by a continued withdrawal of deposits from a number of banks, banking legislation was enacted in the United States in 1933 and 1935 which considerably strengthened the hold of the Federal Reserve Board over the Federal Reserve Banks and member banks.

The Act of 1933 provided for the organization of a new Federal Open Market Committee, consisting of 12 members. The Committee was given the power to formulate general open market policy, which it would recommend to the Federal Reserve Board. But no policy can be effective except to the extent approved by the Board beforehand. No Federal Reserve Bank may engage in open market operations except in accordance with regulations adopted by the Federal Reserve Board.

The control of the Board over open market operations has, on the one hand, been strengthened, and, on the other, the Reserve Banks have been given more voice in formulating general open-market policy.

Other requirements also indicate further centralization of open market requirements :

(1) No Federal Reserve Bank may purchase or sell Government securities except in accordance with an open market policy approved by the Reserve Board and in effect at the time.

(2) In case a Reserve Bank wishes to purchase or sell Government securities for certain specific purposes, for its own account, it must first obtain the consent of the Reserve Board.

(3) The Board has the right to require the sale of any Government securities purchased by an individual Reserve Bank as in (2).

(4) Purchases and sales other than Government securities must be in accordance with the regulations of the Board relating thereto and must be reported daily to the Board.

(5) Rates of interest or discount on acceptances and bills of exchange must be in accordance with schedules approved by the Board.

(6) No obligations payable in foreign currency shall be purchased without the consent of the Board.

(7) No Federal Reserve Bank may purchase or sell cable transfers for its own account without the previous approval of the Board.

(8) No Federal Reserve Bank shall engage in open market operations which have a material effect upon general credit conditions except with the approval of the Board.

The Federal Reserve Banks still enjoy a measure of autonomy in the sense that any such bank may not participate in open market operations, giving the required notice of its intention. Independent buying or selling of Government securities is permitted

(1) in an emergency to afford relief in a situation involving a specific banking institution in the district served by a Federal Reserve Bank, and (2) for other specific purposes for its own account with the previous consent of the Board. The regional principle it maintained when operations are of a local character ; but so far as general credit conditions are concerned, the powers of control exercised by the Federal Reserve Board have been considerably enlarged and strengthened.

10. MINIMUM RESERVE REQUIREMENTS

By the Act of 1933, amended in 1935, the Federal Reserve Board was empowered to change the member banks' reserve requirements by regulation 'in order to prevent injurious credit expansion and contraction,' the minimum reserve percentages not to be less than those existing at the time, nor more than twice such percentages.

In August 1936 the reserve requirements were raised by one-half (to 19½ per cent, 15 per cent 10½ per cent for demand deposits, respectively for the three classes of banks, and to 4½ per cent for time deposits). The object was to prevent the increase in the cash reserves of the member banks, resulting from heavy imports of gold, from being used for injurious credit expansion.

In the beginning of 1937 it was again decided by the Board of Governors of the Federal Reserve Board to make a further increase in reserve requirements in two stages up to the limit allowed by legislation, namely double the minimum reserves existing prior to August 1936. From 1st May, 1937, to 15th April, 1938, the reserve requirements were 26 per cent, 20 per cent, and 14 per cent for demand deposits for the three categories of banks respectively, and 6 per cent for time deposits.

It should be noted that member banks may and do keep with the Reserve Banks balances far in excess of the legal requirements. Suppose the amount of the excess reserves is greater than the open market portfolio of the Federal Reserve System. Then open market operations may fail to bring about credit restriction—their only result will be to reduce the excess reserves of the member banks. To make the open market operations effective, excess reserves must be brought within the scope of control through the system's open market portfolio. The increase of 50 per cent in the minimum reserves in August 1936, reduced the excess reserve balances of the member banks from 3,100,000,000 to 1,800,000,000 dollars. On the 1st of May, 1937 the doubling of the minimum reserves existing prior to 1936, reduced the excess reserves to 875,000,000 dollars. The Board of Governors said in the Federal Reserve Bulletin for May 1937 :

"So long as members banks had a volume of reserves far in excess of legal requirements, the customery instruments of credit policy, open market operations and discount rates, were actually ineffective."

To make open market operations effective, excess reserves must be first largely eliminated.

"In this way," the Federal Reserve Bulletin went on, "open market operations, a far more flexible instrument of credit policy than changes in reserve requirements, have once more become an effective means of exerting the system's influence on credit conditions."

The effect of changes in discount rates may be reinforced by open market operations, and the open market operations made effective by changes in reserve requirements.

11. QUALITATIVE CONTROL

The Federal Reserve Board was given power under the Banking Acts of 1933 and 1935 to control the quality of credit granted by the member banks. Any member bank, which makes an undue use of credit for speculation in securities, real estate or commodities, may be suspended from the use of Federal Reserve credit facilities irrespective of the recommendations of the Federal Reserve Bank concerned. The Board may direct any member bank to refrain from further increase of its loans secured by stock or bond collateral for any period, up to one year, on penalty of suspension of all rediscount facilities. Each Federal Reserve Bank is required to keep a watch over the general character and amount of the loans and investments of its member banks, and to make use of such information in deciding whether to grant or refuse advances, rediscounts or other credit facilities.

12. MARGINAL REQUIREMENTS ON SECURITY-LOANS

To control the use of bank credit for stock exchange purposes, the Board of Governors of the Federal Reserve System was empowered by the Securities Exchange Act of 1934 to prescribe rules and regulations with respect to the amount of credit that can be granted against securities. In 1936 the Board fixed a margin of 55 per cent for loans by banks or brokers to their customers for the purchase of Stock Exchange securities, which was reduced in November 1937 to 40 per cent of the current market value of the securities held as collateral. This severe measure was rendered necessary by a heavy fall in the market prices of securities.

13. PUBLICITY

Use is also made of publicity as an instrument of policy. From time to time officials of the Federal Reserve System express their views on financial conditions in official publications of the System, which must influence public opinion. Each of the 12 Federal Reserve Banks publishes a monthly review of economic conditions in its own district. The Board issues a weekly report on the condition of member banks in the principal cities, a weekly statement of the condition of the Federal Reserve System, and a monthly bulletin on general business and credit conditions.

The object of publicity is not only to keep the general public well informed about business conditions in U.S.A. and abroad, but to inspire confidence in the general policy of the Board, and to promote stability. All central banking systems make use of publicity as an instrument of policy.

14. LIMITATIONS

From what has been said above it will be clear that the power of the Federal Reserve System to influence business and credit conditions, and particularly to curb stock exchange speculation, has enormously increased during the past few years. Its responsibility has also increased in an equal measure. The adjustment of marginal requirements in the case of loans against stock exchange securities has an immediate effect upon the volume of such loans. A reduction of the margin can create difficulties for borrowers, and even inflict losses on them. It is obvious that such powers must be used by the System with extreme care and caution. But considering how easily stock exchange speculation gets out of hand in the United States, and the mess it has made of the whole economic life of the country more than once, the System needed a powerful weapon in its armoury to deal with it.

Again, alteration of the minimum reserve requirements gives the Board a most effective means of reinforcing its credit policy. There was no other way of controlling excess reserves when they threatened to make open market operations powerless in giving effect to the credit policy of the Board. It is useful to remember that Central Banks, as a rule, do not allow interest on the balances they keep. In the United States the Aldrich Bill specifically provided that no interest shall be paid on deposits. In the Federal Reserve Act there is no mention of interest on deposits—there is no provision that interest shall be paid, nor any inhibition to pay interest. But interest has never been paid. The explanation is that the major part of the deposits is normally kept idle. The obligation to pay interest would destroy central banking. The lowering of minimum reserve requirements would increase the excess reserves of member banks, and they may be induced to withdraw part of the excess reserves to make loans and advances, or to make a profitable use of the money.

But here psychological influences begin to work. There is nothing to compel them to do so, and even if they wish to enlarge their credit, their clients may not respond. It is the old story of the horse not wanting to drink. But normally it may be expected that lower discount rates, combined with open market operations and the lowering of the minimum reserve requirements, would lead to an expansion of credit. As we have seen, stopping the horse from drinking is easier, provided determined action is taken. A rise of the discount rate, selling of securities, raising of the minimum reserve requirements, and finally the lowering of the margin for loans for the purchase of the stock exchange securities must have the desired effect of restricting credit. The horse can be stopped from drinking.

That the horse could not be thus stopped in 1929 was entirely due to the driver who was unable to decide what to do, his indecision being increased by spectators, some of whom urged him to let the horse drink his fill, while others gave him the contrary advice.

15. STATE CONTROL

When the Federal Reserve Act was passed, individualism was strong in the United States. The country neither wanted politics in banking, nor banking in politics. What is the present situation ?

Local consideration have been subordinated to general interests. Regionalism is not dead, but national considerations are held to be of greater account, and when the general credit situation demands a particular course of action, the autonomy of regional Reserve Banks means little—it is not allowed to obstruct the enforcement of the national policy. There will be now no repetition of the "Chicage incident."

A second factor in the situation is the establishment of an Exchange Stabilization Fund directly under Government control. The Fund was established in April 1934, and, as we have seen, its object was not merely to iron out or smooth undue fluctuations in exchanges arising out of the operation of temporary causes, but to defend the dollar against competitive exchange depreciation. The activities of such funds cannot be without influence on the domestic credit structure, particularly when their concern is the " defence " of the national currency as such. In the United States, moreover, the Secretary of the Treasury has powers to alter the price at which the Exchange Stabilization Fund would buy or sell gold. The American Fund is managed not only for but by the Treasury, or Government, in contrast to the other extreme, represented by the Swiss Exchange Stabilization Fund, which is managed by the Central Bank, subject only to Government concurrence in any major change of policy. In many cases the regulation of the currency, formely a banking ion, has become a Government function. The regulation of currency has the most vital connection with the regulation of banking, and when currency control passes under direct State control, Government will have an increasing share in directing and controlling the banking policy as well.

BALANCE SHEET OF THE FEDERAL RESERVE BANKS

Figures in million dollars.

Assets	End of 1937	1943
1. Gold and gold certificates ...	9,129	19,766
(*a*) Gold certificates in hand and due from U. S. Treasury		
(*i*) Gold certificates with Federal Reserve Agents ...	4,729	13,266
(*ii*) Gold certificates in inter-district settlement fund with Board of Governors ...	2,881	5,256
(*iii*) Gold certificates held by banks ...	1,510	1,010

	Figures in million dollars End of 1937	1943
ASSETS		
(*b*) Redemption Fund—Federal Reserve Notes	9	224
2. Other Cash	352	330
(*a*) Silver certificates, standard silver dollars, subsidary coins	289	291
(*b*) U. S. notes and Federal Reserve Bank notes	63	39
3. Due from foreign Banks	...	...
4. Bills	12	5
(*a*) Bills discounted :—		
(*i*) Secured by U. S. Government obligations	6	5
(*ii*) Other bills discounted	3	...
(*b*) Bills bought in open market	...	...
(*i*) Payable in U. S. Currency	...	
(*ii*) Payable in foreign currencies	3	...
5. Industrial advances	18	10
6. U. S. Government securities, direct and guaranteed	2,565	11,543
(*a*) Bought-outright		
(*i*) Bonds	752	1,630
(*ii*) Treasury notes	1,155	678
(*iii*) Certificates of indebtedness	...	2,467
(*iv*) Treasury bills	658	2,923
(*b*) Bought under repurchase option : Bills	...	3,845
7. Uncollected items	694	2,113
8. Other assets	83	99
9. Total Balanee Sheet	12,853	33,866
LIABILITIES		
10. Capital paid in	133	154
11. Reserves	209	235
12. Federal Reserve Notes in actual circulation*	4,254	16,815
13. Deposits	7,576	15,180
(*a*) Member bank—reserve account	7,026	12,886
(*b*) U. S. Treasurer-general account	142	578
(*c*) Foreign banks	172	1,360
(*d*) Non-member clearing account	95	129
(*e*) Other deposits	141	227
14. Deferred availability items	674	1,432
15. Other liabilities	7	50
Discount rate† of the 12 Federal Reserve Banks (simple arithmetic average of daily rates), %‡	1.46	1
Discount rate at the Federal Reserve Bank of New York§	1	1

*Amounts shown are net. They exclude (1) notes held by issuing Federal Reserve Banks and branches; (2) notes forwarded for redemption ; (3) notes held by the Federal Reserve banks other than issuing banks.

†Discounts for and advances to member banks, secured by Government obligations maturing or callable beyond one year or by other eligible paper. On and after October 30th, 1942, a rate of 1/2 of 1% was applied to advances secured by Government obligations maturing or callable in one year or less.

‡Date of last change : September, 1939

§Date of last change, August 27th, 1937

Gold.—Up to January 30th, 1934, gold was valued at 20.67 dollars per fine ounce (1 dollar = 1.50463 grammes of fine gold) ; subsequently at 35 dollars per fine ounce (1 dollar = 0.88867 gramme of fine gold. This was due to the devaluation of the dollar. The Gold Reserve Act of January 30th, 1934, transferred the title to the gold stock of the Federal Reserve System to the U. S. Government. Since that date the Reserve Banks have held gold certificates or gold certificate credits on the books of the Treasury, against which the Treasury has held gold.

The holdings of the U. S. Exchange Stabilization Fund amounted to (end of) 1938 :80 ; 1939 : 156 ; 1940 : 48; 1941 : 25 ; 1942 : 12 ; 1943 : 43 million dollars.

Bills : *Bills discounted secured by U. S. Government obligations.*—This item represents mainly rediscounts for and advances to member banks and small amounts to non-member banks, and to individuals, partnerships and corporations against collateral of securities issued or guaranteed by the U. S. Government.

Other Bills Discounted.—Includes advances to Federal intermediate credit banks and to individuals, partnerships and corporations under special legislation which has now expired, as well as ordinary rediscounts for member banks.

Bills bought in the open market.—This item represents (1) dollar bankers' acceptances purchased from bill dealers or banks, either outright or under resale agreements, and (2) acceptances payable in foreign currencies purchased from central banks and guaranteed by them.

United States Government Securities.—Purchases and sale of Government securities are the chief instrument of Federal Reserve open-market operations. The information given under Item 6 is of interest in this connection. The second War Powers Act, 1942 authorized the Reserve Banks to purchase Government securities directly from the Treasury ; the aggregate acquired directly and held at one time by the Banks was limited to 5,000 million dollars.

Deposits.—Deposits consist mainly of the reserves of member banks. Details of member bank requirements are shown in the Table given below. Since 1935 the Board has been empowered, as we already know, to increase these minimum requirements up to double the various specified percentages, and requirements have been changed from time to time. The Federal Reserve Act was amended in July, 1942, to allow reserve requirements for banks in central reserve cities (New York and Chicago) to be changed separately from those in other reserve cities. , In April, 1943, member banks were granted exemption from reserve requirements in respect of U. S. Government deposits representing the proceeds of war loans.

MEMBER BANK RESERVE REQUIREMENTS

Per cent of Deposits

	Net Demand deposits			Time deposits (all member banks.)
	Central reserve city banks.	Reserve city banks.	Country banks.	
June 21,1917—August 15,1936	13	10	7	3
August 16,1936—February 28,1937	19½	15	10½	4½
March 1 1937—April 30,1937	22¾	17½	12¼	5¼
May 1,1937—April 15,1938	26	20	14	6
April 16,1938—October 31,1941	22¾	17½	12	5
November 1,1941—August 19,1942	26	20	14	6
August 20,1942—September 13,1942	24	20	14	6
September 14,1942—October 2,1942	22	20	14	6
Effective October 3rd, 1942	20	20	14	6

*Demand deposits subject to reserve requirements, *i.e.*, demand deposits other than war-loans deposits, *minus* cash items in process of collection and demand balances due from domestic banks.

ALL MEMBER BANKS

End of	1937	1943
Number of:		
Banks	6,341	6,738
Branches	2,479	2,793
	Figures in million dollars.	
1. Cash	7,594	113,967
2. Other items of a cash nature	2,259	4,353
3. Bills discounted and bought		
(a) Treasury bills	...	...
(b) Commercial bills, Inland	...	...
(c) Commercial bills, Foreign	..	...
4. Investments and securities	17,794	57,971
(a) Government	14,418	55,677
(b) Other	3,376	2,294
5. Due from Banks (correspondents)	3,484	5,470
(a) At home	3,414	5,450
(b) Abroad	70	20
6. Loans and advances	13,958	16,288
7. Cover for acceptances	155	44
8. Premises	971	861
9. Sundry assets	529	418
10. Total Balance Sheet	46,744	99,372
LIABILITIES		
11. Capital, paid up	2,431	2,416
12. Reserve Funds	2,338	3,193
13. Profit and loss, etc.	603	...
14. Notes in circulation	...	...
15. Cheques and drafts etc., in circulation	767	1,573
16. Due to banks (correspondents)	6,028	10,556
(a) At home	5,565	9,661
(b) Abroad	463	895
17. Deposits	34,043	80,135
(a) Current accounts and slight deposits	22,660	64,866
(b) Savings Account (c) Time or fixed deposits	11,383	15,269
18. Rediscount and other borrowings	15	39
19. Acceptances and Endorsements	174	54
20. Sundry liabilities	345	540

ALL MEMBER BANKS—*Details of interest.*

	1937	1943
1. Cash		
Cash in vault	590	1,132
Reserve with Federal Reserve Banks	7,004	12,835
	7,594	13,967
2. Investments in U. S. Government securities, direct and guaranteed		
Direct.		
Treasury bills and certificates of indebtedness	662	16,431
Treasury notes	4,277	6,906
U. S. Savings bonds	...	171
Other bonds maturing	...	5,260
in 5 years or less	...	14,915
in 5-10 years in 10-20 years	5,635	5,564
after 20 years	...	1,365
Guaranteed.	1,797	2,345
Total	12,371	52,948
3. Loans and Advances		
Commercial and industrial loans, including open market paper	*	7,421
Loans on agricultural commodities covered by purchase agreements of Commodity Credit Corporation	*	461
Other agricultural loans	500	562
Loans to brokers and dealers in securities	950	1,398
Other loans for purchasing or carrying securities	2,752	839
Real estate loans :—	2,548	3,275
on farm land	265	246
on residental property	28	2,419
on other properties	2,283	610
Loans to banks	70	57
Consumer loans to individuals	*	1,484
All other loans (including overdrafts)	7,138	791
Total	13,958	16,288
4. *Deposits.*		
(*a*) Current account and sight deposits :—		
Individuals, partnerships and corporations	19,747	51,820
U. S. Government	781	9,444
States and political sub-divisions	2,132	3,602
Total	22,660	64,866
(*b*) *and* (*c*) *Savings and Time deposits.*		
Individuals, partnerships and corporations	10,806	14,822
U. S. Government	...	115
Postal savings	95	5
States and political sub-divisions	482	327
Total	11,383	15,269
Grand total of deposits	34,043	80,135

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*Not shown separately.

CHAPTER XVI

THE RESERVE BANK OF INDIA

The question of establishing a Central Bank in India engaged the attention of the authorities in 1836, 1859 and 1870. In 1871, Mr. Ellis, a member of the Viceroy's Executive Council, suggested the establishment of one State bank for India with branches at the Presidency towns. The Bank of France, with suitable modifications, was to serve as a model. In 1892, Mr. E. A. Hambro, a member of the Fowler Currency Committee, pointed out that banking facilities of India had not kept pace with the increasing trade. A strong bank, properly constituted, he said, would assist greatly in maintaining the convertibility of the rupee. He thought that such a bank would be likely to carry out the currency regulations in a "more effective way, and in a manner more in harmony with the trade wants of the country, than any Government Department, however well administered, could possibly do." The Central Bank was to be established either on the model of the Bank of England or the Bank of France.

1. MEMORANDUM BY J. M. KEYNES

J. M. Keynes, later Lord Keynes, was a member of the Chamberlain Currency Commission. In the summer of 1913 he, in collaboration with another member, Sir Ernest Cable, drew up a memorandum on proposals for the establishment of a State bank in India, which was published as annexe to the Report of the Chamberlain Commission.

A State Bank.—The Central Bank was to be a State bank. The bank would necessarily have the management of the Government balances and of the note-issue. "It would be contrary to experience elsewhere and to what seems reasonable for India," Keynes said, "to hand over these functions to a purely private institution." The new bank was to be formed by amalgamating the three Presidency Banks into a Central Bank. Three difficulties would have to be faced : (1) Ultimate Government responsibility would have to be combined with a high degree of day-to-day independence for the authorities of the Bank ; (2) the executive officers of the Bank would have to take "a broad and not always a purely commercial view of policy," and at the same time to make use of the commercial instincts and commercial knowledge of representatives of the shareholders, and (3) a high degree of decentralization in the day-to-day management of the Bank would have to be maintained. Regionalism was in accordance with the wishes of the Government of India. In advocating the establishment of a Central Bank the Government of India had written to the Secretary of State in 1900 : "Nothing would be more unwise than to discard the valuable local knowledge, skill and experience of the existing directorates and managements of the Presidency Banks."[1]

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[1] *Currency Reports*, p. 187*n* (Published by the Government of India).

2. REGULATION OF THE NOTE-ISSUE

The English Bank Charter Act of 1844 had been faithfully copied in India in regard to issue of note-currency when, in 1862, the Government of India took over the note-issue from the Presidency Banks. The amount of the fiduciary circulation was fixed and notes exceeding the amount could only be issued against a metallic reserve, rupee for rupee. At first the note-circulation increased slowly, from 3.69 crores in 1862 to 15.77 crores in 1890, but thereafter more rapidly. On the 31st March, 1913, the total circulation amounted to 68.97 crores, of which 14 crores represented the fiduciary issue (rupee securities 10 crores and sterling securities four crores). The excess note currency was represented by 16.45 crores of silver and 29.37 crores of gold held in India, and 9.15 crores of gold held in London. Originally, the amount of the fiduciary circulation was Rs. 4 crores ; special Acts were passed from time to time which increased it to 14 crores in 1913.

With the object of making the currency elastic, four alternatives were considered by Keynes :—

(1) A fiduciary issue fixed in *amount* but with a power to exceed it on payment of a tax. That was the German System.

(2) A fiduciary issue fixed *in proportion* to the note-issue.

(3) As in (1) but with power to exceed the proportion on payment of a tax.

(4) The discretion of the Bank to govern the amount of the reserves, but a limitation of the aggregate issue of notes. That was the French system.

Keynes rejected the last straight away and also neglected the second. He proposed for India a variety of the third alternative. Up to 40 per cent of the gross circulation of notes, he proposed, may be held in fiduciary form without payment of a tax, the balance being held in cash (gold or rupees). Upto 60 per cent may be held in a fiduciary form on payment of a tax to the Government at the rate of 5 per cent per annum on the excess of the fiduciary issue above 4 per cent of the total circulation. The proportion, in a fiduciary form, he recommended, should never exceed 60 per cent, *i.e.*, the proportion of cash should never fall below 40 per cent. 60 per cent was to be an outside limit which the Central Bank would never work near to except, possibly, on occasions of dangerous crises.

How far we have travelled from adequate metallic reserves against the note-issue is shown by the fact that on the 29th of March, 1936, the total note circulation amounted to over 1,238 crores, against which we had a metallic reserve of under 5 per cent (gold coin and bullion 44,42 lakhs and rupee coin 15,83 lakhs, a total metallic reserve of 60,25 lakhs.)

3. BILLS OF EXCHANGE

Keynes suggested the raising of permanent investment to 20 crores; the security for the fiduciary issue beyond the 20 crores of permanent investment was to consist of approved securities (Government paper and possibly a few others).

For the fluctuating part of the fiduciary reserves Keynes preferred bills of exchange, bearing two good names, to Government securities. He pointed out that the American note-issue, which was based on Government paper, had proved hopelessly inelastic. Seasonal expansion of the currency was best based on bills of exchange which were self-liquidating. " In all European countries," he added, " bills are the pivot on which the whole meaning and utility of the note-issue eventually turns."[2]

The rediscount business was to be developed. The State Bank would have on its list certain banks and private financiers of high standing for whom it would be prepared to re-discount freely. The growth of a rediscount business would help Indian joint-stock banking to develop on sound lines, and would also provide a valuable check on it. For only banks which conducted their affairs in a satisfactory manner would be admitted to rediscount facilities, and the risk of losing position on the rediscount list would act " as a deterrent to rash banking."

Keynes did not fail to note that Indian joint-stock banks lacked means of employing their funds in such a way as to keep them fairly liquid. There was no one to whom they could safely lend at call. A bank which had to pay from 4 to 6 per cent to its depositors could not be expected to hold large quantities of high class investments yielding barely 4 per cent. When they bought bills, in most cases the bills had to be kept until maturity. The result was that the banks tended to lock up in industrial enterprises a higher proportion of their resources that was wise. Indian banking had to pay a heavy penalty for this unwisdom. A crisis occurred in 1913 and in two years, 1913 and 1914, 63 banks failed in different parts of the country. Bank failures continued during the war.

A State Bank would be expected to encourage the transaction of business by means of trade bills. A joint-stock bank holding plenty of such bills in its portfolio could, when necessary, turn them into cash by re-discount.

The Chamberlain Commission did not make any recommendations on the question of a State Bank. An examination of the question would have involved a visit to India and a careful study of the conditions on the spot, a task which the Commission thought they were not fitted as a body to undertake.

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[2] *Ibid.*, p. 206,

4. THE CURRENCY COMMISSION OF 1925

Keynes' Central Bank for India was to be a State Bank. He had good reasons for making this recommendation. Government would have a heavy stake in the Bank, and if the Government did not control the Bank there would be " vexatious interference " on the part of the Government in the working of the Bank. The alternative to this was rigid circumscription of the Bank's activities, which, for practical purposes, was out of the question.

Keynes, as we have seen, prepared his Memorandum in 1913. Then came the war followed by limitless currency inflation in central Europe. Inflation was a direct result of unbalanced budgets. The trend of thinking in prominent banking circles was that if a Central Bank were a State Bank, it would be under political pressure, and whenever a budget deficit arose, there would be a tendency to meet it through the issue of more fiduciary currency. Resolutions were passed both by the International Financial Conference of Brussels (1920) and that of Geneva (1922), recommending that " Banks and specially Banks of Issue, should be free from political pressure, and should be conducted solely on lines of prudent finance." That was a verdict of bankers in favour of a shareholders' not a State Bank. In the spirit of these Resolutions, the Hilton Young Currency Commission recommended that a predominent majority of the members of the Local as well as the Central Boards of our Central Bank should derive their mandate from the shareholders of the Bank by election. But the Government of India possessed wide experience in the management of the currency and they would have to entrust their entire banking and remittance business to the Bank ; it was therefore appropriate that the Government should nominate a small minority of members on the Central Board. Of the 14 members of the Board, nine were to be elected by the shareholders. To guard against the danger of political pressure being exercised upon the Boards of the Reserve Bank, the Currency Commission definitely recommended that the Charter of the Bank should provide that " no person shall be appointed President or Vice-President of a Local Board, or shall be nominated as a member of the Central Board, if he is a member of the Governor-General's Council, the Council of State, the Legislative Assembly, or of any of the Provincial Governments or Legislative Councils."

5. THE PRIMARY TASK OF THE BANK

The primary task of the Bank would be " to maintain stable the purchasing power of the rupee, both internally and externally" (para 114). A stable purchasing power of the rupee internally means a stable level of commodity prices. External stability of the rupee means a stable relation to gold and to foreign currencies linked to gold.

To maintain the external stability of the rupee, the Bank was to buy and sell gold at fixed prices. The reserves were meant to safeguard the rate of exchange (18*d*. gold = 8.475 grains of gold), not to satisfy the non-monetary demand for gold. The Currency Commission said :

> " And if the exchanges are stable, and keep within the upper or lower gold points set by the fixation of the price at which the Reserve Bank undertakes to buy and sell gold, it will not be called upon either to buy or sell gold. Provided, therefore, the Bank follows a judicious policy of limiting the monetary circulation to the actual needs of the country by an appropriate credit policy, and so keeps the internal value of the rupee stable, the obligation to buy and sell gold will cause it no embarrassment" (para 115).

The internal value of the currency re-acts on the external value. Internal depreciation is followed by external depreciation—there is abundant experience to confirm the truth of this proposition. It is, therefore, evident that the Central Bank must be placed in a position to control the volume of the monetary circulation. The Bank must enjoy the sole right of note-issue and all further issues of money by the Government, except through the Bank, must cease. The Bank must control credit, and bring about an expansion or contraction of the monetary circulation according to the circumstances. The process of expansion and contraction would become automatic if carried out on the basis of self-liquidating assets, *i.e.*, commercial bills. A bill drawn in respect of a genuine commercial transaction liquidates itself with the liquidation of the commercial transaction which gave rise to it. " It is for this reason," wrote the Commission, " that the charters of most of the Central note-issuing banks provide for their note-issues to be secured partly by commercial bills." To promote the growth of commercial bills the Commission recommended the abolition of the stamp duty on bills of exchange (para 116).

6. OPEN-MARKET OPERATIONS

The Currency Commission did not consider open market operations by the Reserve Bank as an indispensable method for giving effect to the credit policy of the Reserve Bank. But they expected that that method of credit control would follow in the wake of banking progress and the growth of a large and healthy bill market. " Experience in other countries shows," the Commission wrote, " that with the creation of a Central Bank, and the consequential development of a sound banking system, the bill market comes into being in a surprisingly short time." To provide for this development the Reserve Bank was to have power to buy and sell in the market bills of exchange, promissory notes, or other commercial paper arising out of *bona fide* commercial or trade transactions, bearing two or more good signatures, and having a maturity of not exceeding 90 days.

7. THE PROPORTIONAL RESERVE SYSTEM

Joint-Stock banking and the use of the cheque as currency were developing in India, but it was still of the greatest importance to render the note-currency elastic. The Currency Commission recommended the adoption of the proportional reserve system of note-issue, the proportion of the fiduciary issue being permitted to increase, when considered desirable, on payment of a graduated tax to the Government on the excess issues.

8. EXCHANGE AND PRICES

We have seen above that, according to the Currency Commission, it was the primary task of the Bank to maintain both the internal and the external value of the rupee at a stable level. In 1927 the gold value of the rupee was officially fixed at the equivalent of 18*d.*; the exchange value of the rupee had been successfully maintained at that rate during the preceding two years, so that 18*d.* was the *de facto* rate. The United Kingdom had returned to the pre-war gold standard in 1925. We officially restored the gold standard in 1927, at a rate of exchange 12½ per cent higher than the pre-war rate.

In view of the Home Charges, which then amounted to £35 millions annually, and which, later, rose to £40 millions annually, very great importance had always been attached to a stable *external* value of the rupee. The Chamberlain Commission, for example, had stated : " The establishment of the exchange value of the rupee on a stable basis has been and is of the first importance to India." The Commission approved of the technique which had been developed in India to prevent a fall in the gold value of the rupee below the lower specie point—the well known technique of the gold exchange system. (No means can be devised to prevent the collapse of the gold exchange system on account of the rise in in the price of silver above the bullion par of the rupee). The Chamberlain Commission regarded it as essential that for exchange purposes the internal currency should be supported by adequate reserves of gold and sterling, and they had recommended that the Government of India should definitely undertake to sell bills in India on London at the rate of 1*s*—329/32*d.* per rupee whenever called upon to do so.

The Hilton Young Commission recommended the adoption by India of the gold bullion standard, the gold exchange standard having proved unreliable. The maintenance of the external stability of the rupee was still the first objective of currency reform. Schedule I annexed to the Report of the Currency Commission of 1925, speaks of the maintenance of the external value of the currency as " the Bank's primary task." Internal stability of the rupee is to be interpreted in terms of external stability. " Stallility of the general level of commodity prices " mentioned the para 114 of the Report, did not mean actual stability of the purchasing power of the rupee in terms of goods and services in India, but a level of commodity prices required to keep the external value of the rupee stable.

It should be clearly understood that under the international gold standard, when it is working smoothly, the levels of commodity prices in different countries tend to move together. They must move together, if the gold values of the different momentary units are to remain stable. For example, if prices are falling in most gold standard countries, while Indian prices do not fall, our exports will be penalized and imports subsidised, with the result that gold will tend to flow out. A depletion of the reserves would force us to leave the gold standard. Therefore, before that happens, the Central Bank must use all the weapons in its armoury to bring about a contraction of the monetary circulation, so that prices fall. When they have fallen sufficiently, equilibrium would be re-established in respect of the demand for and the supply of foreign currency.

But external stability thus regained is always at the cost of internal stability. Circumstances are easily imaginable in which internal stability, or a stable level of commodity prices, and consequently a stable level of domestic incomes, may be more desirable than a stable external value of the currency. There is thus a choice between external and internal stability. The importance of this choice was realised by agricultural countries only as a result of bitter experience during the great Depression. To our official currency reformers before 1931, a choice in this sense never presented itself. Their main objective was a gold value of the rupee fixed in terms of gold, and they assumed that when external stability was guaranteed, internal stability followed as a matter of course.

9. THE FIRST RESERVE BANK BILL, 1927

Nothing came of the first Reserve Bank Bill.

Differences arose in the Legislative Assembly on two points. In the first place the Assembly, by a majority, decided that the Central Bank should be a State Bank; secondly, the Assembly insisted on the inclusion of representatives of Central and Provincial Legislatures in the Boards of Directors.

Indian opinion preferred a State Bank, that is a bank with capital subscribed by the Government, in place of a Bank with private share-capital. The advantages of a shareholders' bank were recognised: the board of management is elected by the shareholders, and this provides a ready-made constituency for the selection of a representative directorate. Further, members of the board have themselves contributed to the capital of the bank, and they are accountable to the shareholders for money which the latter have contributed. Such a bank may also be completely independent of the State. But the fear of non-officials was that in the special circumstances of India, a Central Bank directed by a body responsible only to a number of private shareholders, would tend to be controlled by vested interests, and that its utility to the public might even be endangered by a conflict of interests within the management of the Bank between Indian and external capital.

As the differences between the official and non-official points of view proved irreconcilable, Government announced on 8th

September, 1927, that they did not intend to proceed with the Bill. Later, on February 6, 1928, discussion on the Bill was resumed, but the rejection by the Assembly of Clause VIII, relating to the constitution of the Board of Directors, ended the discussion.

It may be noted that the really powerful argument in favour of a State Bank, such as that advanced by Keynes in his Memorandum, played no part in the rejection of the first Reserve Bank bill. In the conditions of India it was impossible for the Central Bank to be independent of the State—its general policy must be such as the Government requires. We have already noticed that in recent years the control of currency in most countries has tended to pass into the hands of Government. The " independence " of a Central Bank to-day in controlling currency and credit is more imaginary than real.

10. THE RESERVE BANK OF INDIA ACT, 1934

A new Act constituting the Reserve Bank of India received the assent of the Governor-General on 6th March, 1934. The defined object is " to regulate the issue of bank notes and the keeping of reserves with a view to securing monetary stability in British India and generally to operate the currency and credit system of the country to its advantage." The Act leaves the question of the monetary standard best suited to India to be settled later ; it only makes " temporary provision on the basis of the existing monetary system."

Constitution.—The Reserve Bank is a shareholder's bank. The share capital of the Bank is five crores, divided into fully paid-up shares of Rs.100 each. The nominal value of the shares originally assigned to the various Registers is as follows : Bombay 140 lakhs, Calcutta 145 lakhs, Delhi 115 lakhs, Madras 70 lakhs and Rangoon 80 lakhs. British subjects ordinarily resident in India but domiciled in the United Kingdom or in the British Dominions, and companies incorporated in the United Kingdom or the British Dominions having a branch in British India, may become shareholders of the Reserve Bank, provided the Dominion concerned does not discriminate in any way against Indians.

The shareholders of the Reserve Bank receive a dividend at a fixed cumulative rate of 1¾ per cent ; any surplus remaining after the payment of the dividend goes to the Central Government. The distribution of shares between the various areas on certain dates is shown below :

	Distribution of shares on the 31st September, 1939.	Distribution of shares on the 30th June, 1943.
Bombay	207,367	2,25,022
Calcutta	121,335	1,19,243
Delhi	92,764	87,163
Madras	60,109	58,096
Rangoon	18,425	10,476

	Number of shareholders on the 31st December, 1939.	Number of shareholders on the 30th June, 1943.
Bombay	19,945	18,012
Calcutta	13,187	11,299
Delhi	14,193	11,901
Madras	8,377	7,471
Rangoon	1,490	719
Total ...	57,192	49,402

	31st December, 1939.	30th June, 1943.
Average number of shares held by each shareholder	8.7	10.1

The Bombay register of shareholders during this period gained 17,655 shares at the expense of the other registers.

The Reserve Bank Act was amended in March 1940 so as to restrict the tendency of the Bank's shares to become concentrated in fewer hands. Under the amendment no person can be registered as a shareholder in respect of any additional shares acquired after the 26th March, 1940, by him whether in his own name or jointly with another person or persons, so as to bring the total to more than Rs.20,000. Further, no shareholder is entitled to any dividend on any such additional shares held by him, nor can he exercise any rights in respect of such shares except for the purpose of selling them. This amendment should check the tendency of the shareholders to own large blocks of shares. During the period to which the figures relate the number of shareholders declined from 57,192 to 49,402, and the average number of shares held by each shareholder increased appreciably.

11. THE CENTRAL BOARD

The Central Board consists of a Governor and two Deputy Governors appointed by the Governor-General in Council, four Directors nominated by the Governor-General in Council, eight Directors elected on behalf of the shareholders on the various Registers, and one Government official nominated by the Governor-General in Council. In each of the five areas there is a Local Board consisting of five members elected from amongst themsleves by the shareholders on the register for that area, and three members nominated by the Central Board from amongst the same shareholders.[1]

12. THE BUSINESS WHICH THE BANK MAY TRANSACT

The Bank may purchase, sell and rediscount bills of exchange and promissory notes (*a*) drawn and payable in India, maturing with 90 days and arising out of *bona fide* commerical or trade transactions, (*b*) drawn and payable in India, maturing within nine months and drawn or issued for the purpose of financing seasonal agricultural operations or the marketing of crops, and (*c*) drawn and payable in India, issued or drawn for the purpose of holding or trading in securities of the Government of India, or a Local Government, or specified securities of States. In each case one of the signatures on the bill must be that of a Scheduled bank.

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[1] Excepting the Governor, Deputy Governor or the Director nominated by the Governor-General in Council, no person may be a Director or a member of a Local Board who is a salaried Government official or a salaried official of a State in India, is an officer or employee of any bank or is a director of any bank other than a bank which is a society registered under the Co-operative Societies Act of 1912.

The Bank may make to States in India, local authorities and provincial co-operative banks, loans and advances against specified securities, which include promissory notes of any scheduled bank, or a provincial co-operative bank, supported by documents of title to goods which have been pledged to any such banks as security for a cash credit or overdraft granted for *bona fide* commercial or trade transactions, or the marketing of crops.

The Bank may purchase and sell Government securities of the United Kingdom maturing within 10 years from the date of purchase, and the securities of the Government of India or of a Local Government of any maturity. The amount of such securities held at any time in the Banking Department is governed by definite rules.

The Bank acts as agent for the Secretary of State in Council, the Governor-General in Council, or any Local Government or Local authority or State in India, in the transaction of financial business, which has been defined. In addition, it receives money from them on deposit (without interest) and also from banks and any other person.

13. BUSINESS WHICH THE BANK MAY NOT TRANSACT

The Bank may not (1) engage in trade or otherwise have a direct interest in any commercial, industrial or other undertaking, (2) purchase its own shares or the shares of any other bank or company, or grant loans upon the security of any such shares, (3) advance money on mortgage of immovable property, (4) make unsecured loans or advances, (5) draw or accept bills payable otherwise than on demand, and (6) allow interest on deposits or current accounts.

14. CENTRAL BANKING FUNCTIONS

The Government of India and Local Governments entrust the Bank with all their money, remittance, exchange and banking transactions in India and, in particular, deposit, free of interest all their cash balances with the Bank.

The bank has been entrusted with the management of the public debt and with the issue of new loans.

The bank has taken over the note-issue from the Government of India and has the sole right to issue notes.

As in the case of the Bank of England, the Issue Department of the Bank is separate and wholly distinct from the Banking Department. The notes are a liability of the Issue Department alone. The notes issued (lowest domination Rs. 5) are legal tender.

Of the total amount of the assets of the Issue Department, 40 per cent consist of gold coin, gold bullion or sterling securities. The remainder of the assets (60 per cent) may be held in rupee coin, Government of India rupee securities of any maturity, and such bills of exchange and promissory notes payable in British India as are eligible for purchase by the Bank. But the amount held in Government of India rupee securities must not at any time exceed one-fourth of the total amount of the assets, or 50 crores of rupees, whichever amount is greater, or, with the previous sanction of the Governor-General, such amount *plus* a sum of ten crores of rupees.

Of the assets in the form of gold or gold coin, 85 per cent must be held in British India.

The reserve requirements may be suspended (for periods not exceeding 30 days in the first instance, which may be extended by 15 days) on the payment of a tax by the Bank upon the amount by which the holding of gold coin, gold bullion and sterling securities is reduced below the prescribed minimum. The tax is payable at the bank rate for the time being in force with an addition of one per cent per annum when such holding exceeds 32½ per cent of the total amount of the assets, and of a further 1½ per cent per annum in respect of every further decrease of 2½ per cent or part of such decrease.

15. RELATIONS WITH OTHER BANKS

The expression " Scheduled banks " has been used above. These are banks mentioned in a schedule attached to the Reserve Bank Act. Their number is now 91. The law requires that every Scheduled bank shall maintain with the Reserve Bank a balance the amount of which shall not, at the close of business on any day, be less than 5 per cent of the demand liabilities and 2 per cent of the time liabilities of such bank in India. (The liabilities in this connection do not include the paid-up capital or the reserve, or any credit balance in the profit and loss account of the bank, or the amount of any loan taken from the Reserve Bank). Weekly returns are submitted by every Scheduled bank to the Governor-General in Council and the Reserve Bank showing, among other things, its demand and time liabilities, its balance at the Reserve Bank, and the amount of advances made and of bills discounted by it. The Reserve Bank also submits a weekly return of the Issue and of the Banking Department to the Governor-General in Council.

It is thought that the percentages for minimum reserve balances are somewhat high for India, but they are lower than the percentages recommended by the Currency Commission—10 and 3 per cent respectively for demand and time liabilities.

To make the control of credit by the Reserve Bank effective it was essential that the requirements regarding the maintenance of the minimum reserve balances with the Reserve Bank should apply to as large a number of banks as possible, and in this respect the Schedule is satisfactory.

As a compensation for the obligation imposed upon Scheduled banks to maintain compulsory deposits free of interest in the Reserve Bank, the facilities which the Reserve Bank provides in the way of rediscount of bills of exchange and promissory notes are restricted to Scheduled banks.

The Bank ordinarily only re-discounts bills of exchange and promissory notes, but the power of direct discount, or open market operations, has not been withheld from it. However, to prevent indiscriminate competition with the commercial banks, it has been provided that this power shall be exercised only when, in the opinion of the Board, such action is necessary or expedient in the interests of Indian trade or commerce.

16. QUESTION OF ELASTICITY

There was a provision in the old Paper Currency Act for the issue of emergency currency against internal bills of exchange or *hundis*. This device imparted a certain measure of elasticity to the currency system. Its working, however, was not unattended with difficulties, and in 1924, in spite of a loan of Rs. 22 crores to the Imperial Bank under the provision mentioned above, the Government had to assist the market by expanding the note-issue to the extent of a further Rs. 12 crores against British Treasury bills earmarked to the Paper Currency Reserve in London. The chief difficulty in connection with the issue of emergency currency against commercial bills is that the internal trade of India is, for the most part, financed by a system of cash credits, and the Imperial Bank found it difficult to secure an adequate volume of bills as cover against the seasonal increase, with the result that the Government were compelled to meet the demand for additional currency by regulating their holding of sterling securities in the Paper Currency Reserve. On more than one occasion the Imperial Bank had to put pressure on its clients to convert cash credits into *hundis* in order that it might have self-liquidation *hundis* to put up as a cover against the loan from the Paper Currency Reserve. These *hundis* or bills, although they represented a real demand for finance for trade, did not represent any definite goods or commodities, being in fact manufactured bills substituted for cash credits.

The provisions of the new Reserve Bank Act, relating to the issue of emergency currency, have been so framed as to meet these difficulties.

In the first place, the Bank is authorised to transact the purchase, sale and rediscount of internal bills of exchange and promissory notes drawn or issued for the purpose of financing seasonal agricultural operations or the marketing of crops. These bills or promissory notes (as we have seen) must bear two or more good signatures, one of which shall be that of a Scheduled bank or a provincial co-operative bank, and they must mature within nine months from the date of purchase or re-discount.

In the second place, in view of the prevalent system or financing the internal trade by cash credits and the difficulty of securing an adequate volume of *hundis* for the purpose, the Bank has been authorised to make loans and advances repayable on demand, or within 90 days, against the security of promissory notes of any Scheduled bank or a provincial co-perative bank on certain conditions.

Finally, elasticity is imparted to the whole system by the provision of the Act relating to the suspension of the reserve requirements.

17. SCARCITY OF BILLS

Indian Joint-Stock Banks hold a comparatively small amount of bills. As compared with their holding of bills their investments (mostly in Government securities) are large. The explanation partly lies in the attractive yield of Government securities. Further Government securities are more helpful in maintaining a liquid position.

Of special interest is the Agricultural Credit Department of the Reserve Bank. The functions of this Department are (1) to maintain an expert staff to study all questions of agricultural credit, and (2) co-ordinate the operations of the Reserve Bank in connection with agricultural credit and its relations with provincial co-operative banks or organisations engaged in the business of agricultural credit.

18. THE RESERVE BANK AND EXCHANGE

From the 1st of April, 1935, the Reserve Bank took over the duty of supplying the Secretary of State with sterling for his London requirements.

There was a sharp fall in exchange in the middle of 1938 and on June 6 Telegraphic Transfers were quoted at Calcutta at 17¾*d.*

The fall in the exchange caused speculation in regard to the action to be taken by the Reserve Bank to maintain the 18*d.* sterling ratio.

Both the *Economist* and the *Statist* commented on the weakening of the rupee. The *Economist* mentioned "the adverse trade balance" as the foremost reason for the weakness of the rupee. The trade balance was not actually adverse but the amount of the favourable trade balance had decreased. That was a serious matter, considering India's debtor position.

The *Economist* said: "Before long the Reserve Bank may be forced to carry out its statutory duty of holding the rupee." Is it the statutory duty of the Reserve Bank to hold the rupee? An inspired statement, which appeared in the *C. & M. Gazette* (Lahore) of May 1, sought to correct the "mistake impression" that it was the duty of Reserve Bank to maintain the 18*d* rate!

The Reserve Bank is under obligation both to buy and sell sterling within the specie points. Section 40 of the Reserve Bank Act is quoted below:

> " The Bank shall sell to any person, who makes a demand in that behalf, at its office in Bombay, Calcutta, Delhi, Madras or Rangoon, and pays the purchase price in legal tender currency, sterling for immediate delivery in London, at a rate not below one shilling and five pence and forty-nine sixty-fourths of a penny for a rupee.
>
> " Provided that no person shall be entitled to demand to buy an amount of sterling less than ten thousand pounds."

Section 41 of the Reserve Bank Act is concerned with the purchase of sterling by the Reserve Bank, at a rate not higher than one shilling and six pence and three-sixteenths of a penny for a rupee.

Section 40 definitely makes the Bank responsible for preventing exchange from falling below the lower specie point. It is a statutory obligation imposed upon the Bank, and that is what " holding the rupee " means. And that is how a Central Bank maintains, the legal rate of exchange. The day-to-day exchange value of a currency is determined by supply and demand for foreign remittance, but if the law of supply and demand tends to depress exchange below the lower specie point, the Central Bank must intervene.

19. CREDIT CONTROL

The relations of the Reserve Bank of India with Scheduled banks are essentially the same as those in the Federal Reserve system. The Reserve Bank grants temporary accommodation only. It may refuse to rediscount the paper of any particular Scheduled bank without assigning a reason. In granting accommodation it takes into consideration not only the nature of the security offered but also the general character of the investments of the applying bank and the manner in which its business is being conducted. The Reserve Bank also endeavours to ensure that the credit granted by it is not misused in any way. Similarly in U. S. A. the Federal Reserve Banks now seek to control not merely the quantity of credit which they grant to member banks, but also its quality. After the banking crisis of 1929 the control of the Federal Reserve system over the member banks was tightened, as we have seen.

We have, however, no insurance of deposits as in the United States. Compulsory insurance of deposits to a maximum sum of says, Rs. 5,000, of any one depositor in any one bank would protect all but the biggest depositors and tend to increase the confidence of the public in joint-stock banks. The maximum limit is 5,000 dollars in U. S. A.

Apart from the insurance of deposits, we possess a central banking system like that of the United States. But central banking in India has not the same significance as in America or other countries, The chief function of a Central Bank is to control credit, and through credit control, prices. The terms of credit determine the rhythm of business life. They are not constant, but rise and fall about an " equilibrium position." When the terms of credit are lower than the equilibrium level, prices rise and profits are made by enterpreneurs, or there is a boom. This continues until the terms of credit and their equilibrium level are brought closer together. If the terms of credit are higher than the equilibrium level, prices fall and entrepreneurs suffer losses, or there is a slump.

When investment is equal to saving, the terms of credit are at the equilibrium position.

The aim of a Central Bank is to so regulate the flow of investment, or the creation of new capital, that it is equal to saving. It endeavours to do so by influencing credit creation by joint-stock banks.

This is the essence of the theory behind central banking. This theory assumes that there is an intimate connection between the level of prices and credit, and that prices (and thereby, investment, wages and profits) can be regulated through the manipulation of the Bank rate.

Credit is an important price-determining factor in Western countries. In India, on the other hand, cash (rupees and notes) determine prices, not credit created by joint-stock banks. Our Reserve Bank, set up in imitation of other countries, apart from relieving Government of the responsibility for managing the currency system, serves mainly an ornamental purpose.

20. CORRELATION BETWEEN CREDIT AND PRICES

The relation between credit and prices can be expressed quantitatively with the help of a simple statistical device—the co-efficient of correlation. A co-efficient of + 1 indicates perfect correlation, one of zero signifies no correlation, and a co-efficient of — 1 means that correlation is perfect but inverse.

The statement given below supplies the data for calculating the co-efficients of correlation between deposits (credit) and wholesale prices in the United States and India for the period 1930-38 :

Year	UNITED STATES.		INDIA.	
	Demand Liabilities in 1,000 million dollars.	Wholesale prices 1929=100.	Total commercial bank deposits Million Rs.	Wholesale prices 1914=100.
1930	24.1	90.7	2,124	116
1931	21.3	76.6	1,975	96
1932	16.4	68.0	2,177	91
1933	15.3	69.2	2,213	87
1934	17.6	78.6	2,276	89
1935	21.6	83.9	2,450	91
1936	25.4	84.8	2,575	91
1937	26.9	90.6	2,629	102
1938	25.8	82.5	2,555	95

In the United States the movement of wholesale prices on the whole closely followed the movement of credit, and the co-effieient of correlation is + 0.87.

For India we have no figures of demand deposits for the earlier years. The co-efficient of correlation between total commerical bank deposits and wholesale prices is – 0.13, signifying total absence of direct connection between the expansion and contraction of credit and wholesale prices. The co-efficient of correlation between prices and currency (rupees and active circulation of notes), on the other hand, is + 0.65.

The co-efficients of correlation between commercial bank deposits and wholesale prices for four other countries are given below :—

United Kingdom	...	1930-38	r	=	+ .79
Germany ..	..	1930-36	r	=	+ .80
Netherlands ...	...	1930-37	r	=	+ .92
Japan ...	...	1930-38	r	=	+ .98

The contrast between the co-efficients of correlation for other countries and that for India is striking.

The commerical banks occupy an important place in our money market. They maintain relations with dealers on the stock exchange and also industrialists. But there is a large field of productive activity which is not represented by the classes mentioned, and with which the commerical banks have no direct concern. We mean the financing of agriculture and agricultural operations generally.

The functions of the Reserve Bank have been set forth in an admirable hand-book issued by the Reserve Bank. In regard to credit control, the powers of the Reserve Bank have not yet been subjected to any severe test. The Scheduled banks are not " as a rule large borrowers from the Bank." The other methods of control mentioned are changes in the amount of Treasury bills offered, in the amount of sterling purchased and in the amount of money in circulation, but it is stated, "these methods are comparatively less effective and of limited applicability. Thus, although the Reserve Bank has been entrusted with most of the powers generally given to a Central Bank, its actual control is limited by the peculiar character of the Indian monetary and banking system."*

The passage refers to the relations of the Reserve Bank with the Scheduled banks. But even the strictest control over the Scheduled banks would not give the Reserve Bank control over prices, so long as a direct and intimate connection is not established between joint-stock banks and indigenous bankers financing agriculture.

✓ 21. THE RESERVE BANK AND INDIGENOUS BANKERS

The Central Banking Enquiry Committee complained of the absence of a central co-ordinating agency in the Indian banking system. The Indian money market consisted of various elements

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**Functions and Working of the Reserve Bank of India*, (Bombay), p. 50.

(the Imperial Bank, the Exchange banks, the joint-stock banks, co-operative banks, shroffs in bigger towns and money-lenders in the villages) which were independent of each other. " With the banking system so loosely organised, we cannot expect the Bank rate in India to have the same significance and the same influence on the money market as in other highly developed banking systems." Since then a central co-ordinating agency, in the shape of the Reserve Bank, has been created, but this agency has little connection with indigenous banking. At present it seeks to control (in a very limited sense, as we have seen), the activities of Scheduled banks only.

The problem of linking indigenous bankers with the Reserve Bank has received attention, for it is realised that control over joint-stock banks alone does not create a co-ordinated banking system functioning as a single organism.

" Unfortunately, these joint--stock banks still only cover a small portion of the field. In the smaller country towns and in the villages they are either still non-existent or play a very minor role in comparison with the private indigenous banker, and it is therefore obvious that if India's banking system is to be complete, provision must be made for the inclusion of the latter."[1]

The difficulties in the way are two : – (*a*) Indigenous bankers take deposits to a very small extent, and depend to a very much greater extent for their capital either on their own resources, or on loans from commercial banks. For this reason alone " they cannot be considered eligible for central banking facilities." (*b*) Secondly, indigenous bankers do not confine their activities to banking proper. They are unwilling to shed their business other than banking, and even to segregate banking and non-banking business and keep separate accounts.

The following more important conditions were stipulated for indigenous bankers who wished to be linked directly with the Reserve Bank :—

1. They must confine their business to banking proper.
2. They must maintain proper accounts and have them audited by registered accountants.
3. They must file with the Reserve Bank the periodical statements prescribed for Scheduled banks.
4. The Reserve Bank will have the right of regulating the business of the bankers on banking lines, when necessary.

The present position is a deadlock. It is doubtful if any indigenous banker could be persuaded to take advantage of the Reserve Bank's offer on the conditions stated. " It is better to forego the facility than to submit to such unreasonable demands "[2] —this, at present, sums up their reaction.

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[1] This is stated in the '*Draft-scheme for the linking of indigenous bankers with Reserve Bank of India*" prepared by the latter.

[2] Letter to the Reserve Bank from Seth Fatehchand Gokaldas Bankers, Madura, (see the Statutory Report, issued by the Agricultural Credit Department of the Reserve Bank, in 1937. p. 68.

The following statement shows the position of the Issue Department of the Reserve Bank of India since 1935-36

RESERVE BANK OF INDIA : ISSUE DEPARTMENT

	Liabilities			Assets					(In lakhs of rupees)
Average of Friday figures.	Notes in Circulation	Notes held in the Banking Department	Total Liabilities (Total notes issued)	Gold coin and Bullion	Sterling Securities	Rupee Coin*	Rupee Securities	Total Assets	Percentage of Gold and sterling securities to total notes issued
1935-36 ...	164,06	27,58	191,64	44,42	62,09	55,51	29,62	191,64	55.58
1936-37 ...	175,81	25,81	201,62	44,42	69,57	64,01	23,62	201,62	56.54
1937-38 ...	186,15	25,61	211,76	44,42	79,92	60,23	27,19	211,76	58.72
1938-39 ...	182,36 (7,97)	28,28 (1)	210,64 (7,98)	44,42	66,95	67,11	32,16	210,64	52.91
1939-40 ...	209,22 (11,09)	18.79 (8)	228,01 (11,17)	44,42	78,63	67,52	37,44	228,01	53.97
1940-41 ...	241,41 (13,38)	17,26 (20)	258,67 (13,58)	44,42	129,92	35,87	48,46	258,67	67.39
1941-42 ...	307,68 (20,20)	12,21 (23)	319,89 (20,43)	44,42	165,00	35,28	75,19	319,89	65.47
1942-43 ...	513,44	11,80	525,24	44,42	319,11	22,33	139,38	525,24	69.21
1943-44 ...	777,17	10,50	787,67	44,42	643.52	14,28	85,45	787,67	87.34
1944-45 ...	968,69	10,93	979,62	44,42	863,73	13,52	57,95	979,62	92,70

Note : Burma figures shown within brackets below totals. Figures for India only from June 1942.

*Including Government of India rupee notes from July 1940.

It will be seen that from an average of 210,64 lakhs in 1938-39 total notes issued increased to 979,62 lakhs in 1944-45, an increase of 768,98, lakhs in total note circulation. The amount of sterling securities held in the Issue Department increased during the period from 66,95 lakhs to 863,73 lakhs, or by 796,78 lakhs. There has been no change in the amount of gold coin and bullion held against the notes. The proportion of gold coin and bullion to the total notes issued was about 22.66 per cent in 1935-36, 24.36 per cent in 1938-39 and 4.53 per cent in 1944-45. At the end of March, 1946, the total notes issued amounted to 1,238,41 lakhs against which the Issue Department had the same 44,42 lakhs of gold coin and bullion, 1,120,32 lakhs of sterling securities, 15,83 lakhs of rupee coin and 57,84 lakhs of rupee securities. The percentage of gold and sterling securities to the total note-issue was 94.05, and of gold alone about 3.59.

The progress of India during the war towards the ideal currency of the future was remarkable. The note currency is inconvertible. It passes from hand to hand in daily transactions not because it represents a fixed quantity of gold or silver but because of Government *fiat*. For internal purposes the convertibility of rupees into sterling, which has itself no fixed gold value, means little.

The following statement shows the position of the Banking Department of the Reserve Bank of India since 1935-36 :—

Reserve Bank of India: Banking Department.

In Lakhs of Rupees

	Deposits													
Average of Friday figure.	Central Govt.	Other Govts.	Banks.	Others.	Total	Other Liabilities	Total Liabilities or assets.	Notes and coin.	Balances held abroad.	Loans and advances to Govt.	Other loans and advcs.	Bills purchased and discounted.	Investments.	Other Assets.
1935-36	11,26	...	27,26	9	38,61	91	49,52	27,68	14,99	86	1	..	5,47	51
1936-37	9.83	...	26,56	41	36,80	113	47,93	25,90	13,61	1,54	1	1	6,04	82
1937-38	11,37	...	24,96	69	37,02	87	47,89	25,70	13,48	79	2	6	7,12	72
1938-39	14,90	...	16,19	75	31.84	128	43,12	28,38	4,21	1,72	2	1,53	6,36	90
1939-40	6,84	7,00	17,82	1,05	32,71	154	44,25	18,88	12,34	1,05	11	2,87	7,25	1,75
1940-41	10,03	7,37	36,84	1,91	56,15	256	68,71	17,39	39,32	2,01	7	97	7,78	1,17
1941-42	9,65	7,95	37,73	3,89	59,22	433	73,55	12,35	46,08	4,09	4	27	8,96	1,76
1942-43	12,99	8,10	57,36	3,30	81,75	791	99,66	11,92	75,11	1,49	4	68	7,12	3,30
1943-44	29,31	13,16	64,69	6,65	113,81	1082	134,63	10,67	111,72	49	15	91	7,61	3,08
1944-45	162,67	16,83	90,57	13,25	283,32	1406	307,38	11,19	277,28	43	11	1,46	13,13	3,78

In the above table under "Deposits" "Other Governments" means Provincial Governments and "Banks" means the Scheduled banks and Provincial Co-operative banks. "Others" means "sundries" or miscellaneous; sums which the Reserve Bank owes to others, but which have not yet been paid, are shown under this head, *e.g.*, undistributed salaries of the staff or any other unadjusted amount, *e.g.*, a remittance from the Imperial Bank of India.

"Other liabilities" comprise six accounts—discount, interest exchange, commission, adjusting, profits and loss. When the bank is in credit under these heads, the sum earned is a liability to shareholders.

Notes are a liability of the Issue Department, but an asset of the Banking Department. "Other loans and advances" means loans and advances to scheduled banks and provincial co-operative banks. The bills purchased and discounted by the Reserve Bank become the property of the Bank and therefore its assets. The head "investments" shows the amount of invested by the Bank in the securities of the Government of India other than Treasury bills. "Other Assets" comprise sums due to the Reserve Bank in the accounts mentioned under "other liabilities" above, and such minor heads as "dead stock," *e.g.*, furniture and stationery.

Of the total assets amounting to 307,38 lakhs in 1944-45, 277,28 lakhs, or little over 90 per cent were held abroad in the form of cash and short-term securities.

The position at the end of March 1946 is shown below :—

Banking Department of the Reserve Bank of India, March 29, 1946.

LIABILITIES	LAKHS OF RS.	ASSETS.	LAKHS OF RS.
Deposits.			
Central Government	521,01	Notes and coin	19,83
Other Governments	35,90	Balance held abroad	603,97
Banks	76,90	Loans and advances to Governments	—
Others	9,56	Other loans and advances	18
Total Deposits	643,37	Bills discounted and purchased	2,60
Other liabilities	19,88	Investments	30,63
Total liabilities or assets	673,25	Other assets	16,04

The Bank has a capital and Reserve of 10 crores of rupees, which forms part of its liabilities.

SCHEDULED BANKS

The following statement shows the Scheduled banks' consolidated position in India and Burma since 1935-36.

Scheduled Banks' Consolidated Position in India and Burma.

Average of Friday figures.	No. of Scheduled banks at the end of each period.	Demand liabilities.	Per cent of (b) to (f)	Time liabilities.	Savings Deposits. **	Total demand and time liabilities.	Cash.	Balances with Reserve Bank.	Excess of (h) over the statutory minimum.	Total cash and balances with Reserve Bank.	Per cent of (j) to (f).	Advances.	Bills discounted.	Total Advances and Bills discounted.	Per cent of (n) to (f).
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
1935-36	50	121,90	55.3	98,66	+	220,56	5,95	31,86	23,79	37,81	17.14	87,70	3,56	91,26	41.38
1936-37	50	128,58	55.9	101,32	+	229,90	6,01	26,27	17,81	32,28	14.04	97,11	4,70	99,81	43.41
1937-38	54	132,77	54.9	109,04	+	241,81	6,61	24,62	15,81	31,23	12.92	113,43	6,28	119,71	49.51
1938-39	55	129,98	54.7	107,85	+	237,83	6,64	15,94	7,28	22,58	9.50	115,85	4,86	120,71	50.75
		(6,17)		(4,55)		(10,72)	(26)					(4,51)	(26)	(4,77)	
1939-40	59	139,65	56.8	106,03	38,86	245,68	7,08	17,43	8,33	24,51	9.98	125,89	5,25	131,14	53.38
		(7,01)		(4,08)		(11,09)	(35)					(4,42)	(28)	(4,70)	
1940-41	63	163,90	61.0	104,94	37,58	268,84	8,37	36,42	26,13	44,79	16.66	122,13	3,84	125,97	46.86
		(8,11)		(3,75)		(11,86)	(42)					(4.43)	(15)	(4,58)	
1941-42	59	211,35	66.3	107,61	37,24	318,96	9,86	36.65	23,93	46,51	14.58	120,20	4,93	125,13	39.23
		(11,22)	+	(4,24)		(15,46)	(70)					(4,88)	(9)	(4,97)	
1942-43*	61	306,28	74.6	104,21	48,30	410,49	12,97	55,73	38,33	68,70	16.73	95,68	2,18	97,86	23.83
1943-44*	75	456,03	76.2	142,78	68,03	599,41	20,57	63,63	37,99	84,20	14.05	156,14	5,59	161,73	26.98
1944-45*	84	584,80	75.1	194,12	90,58	778,92	27,31	89,25	56,90	116,56	14.96	224,22	11,16	235,38	30.22

Note:—Burma figures shown in brackets. *Figures for India only. **For the purposes of Section 42 of the Reserve Bank Act, the Savings Bank Deposits are classified into demand or time liabilities according to rules of the various Scheduled banks in respect of withdrawal of these deposits. + Figures not available.

It will be seen that of the total demand and time liabilities, demand liabilities represented 55.3 per cent in 1935-36, 54.7 per cent in 1938-39 and no less than 75.1 per cent in 1944-45. The very great expansion of demand liabilities is explained by " created money," or the very great expansion of the note circulation during the war. While time liabilities increased by about 80 per cent between 1938-39 and 1944-45, demand liabilities rose approximately 4½ times. Those who made money during the war preferred to have most of the money readily available in the form of demand deposits.

It will also be seen that of the total of advances and bills discounted, bills discounted form an inconsiderable proportion. Of particular interest is the excess of balances over the statutory minimum maintained by the Scheduled banks with the Reserve Bank. For 1944-45 the figure is 56,90 lakhs, but in May 1944, the excess balances reached a total of 69,99 lakhs. In May 1934, the Banking Department of the Reserve Bank held " Investments " (in Government securities) of the value of 10,74 lakhs, while the Issue Department held rupee securities of 58,33 lakhs, a total of 69,07 lakhs of Government securities, a sum slightly less than the amount of the excess balances.

In the United States, it was found necessary to re-inforce the effects of " open-market operations " by the power to alter the minimum reserve requirements. We have seen that when the amount of excess balances is greater than the securities held by the Federal Reserve System, all that open market operations can hope to achieve is the reduction of excess balances. The member banks would still be in a comfortable position and not feel compelled to restrict credit. The raising of minimum reserve requirements, by reducing heavily the amount of excess balances, forces them to give effect to the policy of the Federal Reserve Board. In India, if the amount of the excess balances tended to grow, thus weakening the effect of a rise in the Bank's discount rate and open market operations, it may be found necessary (*a*) to raise permanently the minimum reserve requirements, and (*b*) to give the Reserve Bank power, which is enjoyed by the Federal Reserve System in the United States, of raising within prescribed limits the minimum reserve requirements in force. The question is of no importance at present.

The position of the Scheduled banks at the end of March, 1946, is shown by the following statement :—

Scheduled Banks, 29th March, 1946.

Number of Scheduled banks.	91
Liabilities in India :—	
1. Demand	700,80 Lakhs
2. Time	296,37 Lakhs
3. Total	997,17 Lakhs
4. Cash in India (Notes and coin)	35,64
5. Balances with Reserve Bank	75,56
6. (4+5) as percentage of (3)	11.15
7. Advances in India.	351,43
8. Bills discounted in India	19,73
(7+8) as percentage of (3)	37.22

Of the total of advances and bills discounted, the latter represented 5.3 per cent. The excess balances amounted to about 35 crores.

✓ 22. THE FUTURE OF THE RESERVE BANK OF INDIA

The Reserve Bank has taken over the management of the currency from the Government. The Reserve Bank, and not the Central Government is now responsible for maintaining the external value of the currency. The Reserve Bank is also the custodian of the banking reserves of the country. It is in intimate contact with the Scheduled banks, and in a time of trouble they may look to it for assistance. But a Central Bank has also other duties to perform—the maintenance of a stable internal value of the currency unit. It will be admitted that a Central Bank like our own is not in a position, under existing conditions, to control prices, except in so far as prices may be made to rise to any desired level by currency inflation, such as was brought about by the issue of notes against sterling securities during the last war. No Reserve Bank was needed for that purpose. If the Reserve Bank had not been in existence at the ourbreak of the second world war, the expansion of Government note currency would have produced precisely the same effect. There was moderate inflation during the first world war and our prices rose. A policy of deflation, consistently pursued for a number of years, brought down prices after 1920.

Credit control by the Reserve Bank of India, as we have seen, has a very limited meaning. The Indian money market is not a coherent unit, it is not one organism. So long as it preserves its present loose structure, with semi-independent parts, credit control by the Reserve Bank with the object of stabilizing the internal value of the rupee must remain largely ineffective. A discussion of the means which might be employed to knit the various parts of the money market more closely together, so as to impart a real meaning to central banking in our country would be interesting. But such discussion is futile when the future of Reserve Bank itself is uncertain. The Reserve Bank of India is in the melting pot. The shape or form in which the Reserve Bank will finally emerge from the melting point must be different from that of the existing Reserve Bank. Why?

India is to have a new Constitution, a Constitution of "independence." The details of the new constitutional settlement have yet to be worked out, but the basis of the settlement is a definite economic partition of the country. The all-India Union would deal with three subjects only, Foreign Affairs, Defence and Communications. All subjects other than the Union subjects or all residuary powers would vest in the provinces. Provinces will be formed into Groups and each Group will have the power to determine the provincial subjects to be taken in common.

The formation of Groups by Provinces is essential as the provincial subjects include Customs and Currency. Section "A" Provinces are: Madras, Bombay, the United Provinces, Bihar, the Central Provinces and Orissa. This Group of Provinces we may call Hindustan. Section "B" provinces are: the Punjab, the N. W. F. P. and Sind. We may call this Group western Pakistan. Section "C" provinces are Bengal and Assam, which we may call "Eastern Pakistan."

Since there would be an-all-India Centre, dealing with Foreign Affairs, Defence and Communications, the political unity of the country is preserved. But the provincialization of Customs and Currency will split economic India into two independent parts, Hindu India and Muslim India.

Railways have a levelling effect upon prices throughout the area which they serve, for they enable the surplus of one area to meet the deficit of another. By removing local disparities in prices railways also exercise a certain equalising effect upon wages and profits, or upon incomes generally. We have deliberately said "a certain equalising effect," for in spite of a wide-spread and efficiently operated system of communications, the levels of incomes in different parts of the same country cannot be made absolutely equal. Labour and capital are never perfectly mobile even within the same country.

In a sense, therefore, the Central control of Communications promotes the economic unity of the country. The division of labour or specialisation is encouraged and the whole country shares in the advantages resulting therefrom.

But in the new Constitution, the Central control of Cmmunication is not based on economic but political considerations. Russia is an uncertain factor in world politics, and the Indian political situation is not entirely free from possibilities of violent upheveals. In such circumstances, Central control of railways and other means of communications is positive necessity.

There is no point in provincialising the Tariff unless it is contemplated that Hindu tariff policy may be different from

Muslim tariff policy. In this connection one may recall the denunciation of protection by Mr. H. Calvert, the author of *Wealth and Welfare in the Punjab.* To the Punjab it was of great importance, said Mr. Calvert, that there should be a free market for such wheat, cotton, oil seeds or other goods as she can produce. Now Lancashire cannot be expected to buy Punjab-American cotton if she is not allowed to import into India her cotton goods. " By no power of reason can it be shown," says Mr. Calvert, " that the Punjab can do any thing but lose by the present policy of protection." Free imports of Lancashire goods into India might check the growth of the Bombay cotton mill industry, but what is that to the Punjab? Under the new Constitution, with the Tariff ceasing to be a Central responsibility, Hindustan may limit Lancashire imports by means of a protective tariff while Pakistan may freely admit them. Mr Calvert advocated a return to the tariff of the year 1913-14 when imports paid an *ad valorem* duty of 5 per cent. We had then a purely revenue tariff.

Assume that the tariff policy of Hindustan is heavily protectionist, while Pakistan follows the path indicated by Mr. Calvert. Then imported cotton goods will be cheaper in Pakistan than in Hindustan. If no trade barriers existed between Hindustan and Pakistan, Pakistan imports could be sold at a profit in Hindustan, thus neutralising the restrictive trade policy of Hindustan. Therefore, with different tariff policies, there cannot be free trade between Hindustan and Pakistan. Different tariff policies will effectively separate Hindustan from Pakistan, and the two regions will have, and must have, under independent tariff policies, independent levels of prices, wages and incomes generally.

This effect will be reinforced by the provincialisation of currency and exchange.

It is quite possible that Hindustan and Pakistan may work with different exchange ratios. Provincialisation of Currency does not mean a separate exchange ratio for each province. This is impossible, just as each Province cannot have its own independent tariff policy. But western Pakistan may stabilise its currency at the rate of 18*d.* and Hindustan at a lower ratio. Again, different exchange ratios will produce different levels of prices, wages and incomes generally, which can only be maintained by disallowing the free and unrestricted flow of goods between the different regions.

Such is the picture of economic India suggested by the provincialisation of Tariff and Currency. It is obvious that a single Central Bank cannot serve two economically independent regions. Hindustan and Pakistan must have separate Central Banks. The United States has in fact 12 Central Banks, but as we have seen, the Federal Reserve system is so worked now that the whole country has one credit policy. In India there would be no Board to co-ordinate the policies of two (or more) Central Banks. And, in fact,

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there could be no co-ordination, given independent tariffs and exchange ratios.

When the new Constitution begins to work the whole problem of Central Banking would have to be thought out afresh, and separately, in relation to economic and other conditions of Hindustan and Pakistan.

CHAPTER XVII

LONG-TERM CAPITAL

So far we were concerned with short-term credit. The Bank rate determines the price of short-term credit, and open market operations and the other devices which have been mentioned have, as their object, the regulation of the volume of short-term credit. In England, in the past, the commercial banks, as a rule, played no direct part in meeting the long-term requirements of industry, but in this respect the position has considerably changed in recent years. In this chapter we are principally concerned with the financing of industry in England, France and Germany

1. SIR ARCHIBALD ROWLAND'S BUDGET SPEECH, 1946-47

Sir Archibald Rowland's Budget Speech, delivered in March 1946, is memorable for more than one reason. He laid it down that fiscal policy "must subserve the ends of national policy." Its object is not merely to raise a given revenue, " but to raise it in such a way as to obtain the maximum social and economic advantage," while distributing the burden as justly and fairly as possible between the various classes of tax-payers. A German economist, Wagner, was the first to emphasize the socio-political objects of taxation.

We are here more directly concerned with the Finance Member's proposals regarding industrial finance. He said :

"An advanced stage of preparation has been reached in respect of the establishment of an Industrial Finance Corporation in order to ensure the availability of medium and long-term credits to industrial enterprise in India where the more normal methods of industrial finance are inadequate."

The whole question of industrial finance needs re-examination in the light of post-war developments and policies. No big industrial advance is possible without the provision of adequate credit facilities for industry. The Central Banking Enquiry Committee, whose report was published in 1931, recommended the establishment of Provincial Industrial Corporations with Government assistance. The share-capital of a Provincial Industrial Corporation was to be raised mainly by public subscription, but Government were to borrow and supply any deficiency. Apart from Provincial Industrial Corporations, the Central Banking Enquiry Committee recommended the establishment of an all-India Industrial Corporation, which was to serve as a link between Provincial Governments and the large spending departments of the Central Government and to secure direct co-relation for the industries as a whole with railway rates, customs, stores-purchase and other policies of the Central Government. No action was taken by the Government of India on these recommendations. Very probably the Government of India agreed with the foreign experts associated with the Committee, who said :

"Practical experience proves that a company with a certain purpose ought not to be formed without an immediate constructive object. As the saying goes ' one ought not to buy a frame before the picture.' When some Industrial plan fitting in the frame, as designed here offers itself, then the time has come to start an Industrial Corporation."

We had no use for the frame 15 years ago as the picture was non-existent ! The economic partition of the country envisaged in the new constitutional arrangements would involve the partition of industrial finance as well. Hindustan and Pakistan would have to work with independent industrial finance corporations to mobilise the financial resources of the country.

The Finance Member also referred to a National Investment Board : " With a view to securing the fullest and most advantageous utilisation of the economic resources of the country in the interests of planned capital development, investigation is required to determine whether a National Investment Board should be set up for the purpose, and if so, how it should be constituted and on what basis it should work. Meanwhile the existing control over capital issues must necessarily be continued." It is not quite clear what kind of an Investment Board the Finance Member had in his mind. An Investment Trust is to be distinguished from a Management Trust. The Management Trust, like the holding Company, is concerned with a single industry and its subsidiaries. The Investment Trust operates in a wider field. Its object is to diversify investment.

2. ENGLAND

The Investment Trusts in England have two principal forms, the ordinary Investment Trust, and the Fixed or " Unit " Trust. Both forms of Trusts enable the small investor to get a better return on his money with less risk than he would be able to do otherwise.

If you have spare money, you may buy and sell securities with it. There is a certain amount of risk that you run, for industrial securities rise and fall in value daily, and sometimes experience violent fluctuations. If one had considerable resources, one would buy shares of many different companies, so that a fall in the yield of some shares might be compensated by a raise in that of others. This is the principle on which the " fixed," or " Unit " Investment Trust works. With the money placed at its disposal by investors, the " Unit " Trust buys a fixed bundle of mixed securities—this bundle is its "unit." Any single security might vary considerably in yield, but the "unit" bought by the Investment Trust, comprising varied securities, might be trusted to yield a more regular income. The "Unit Trust," having bought its "unit," has to do nothing more, except to collect the dividends and to distribute them among its own subscribers.

The ordinary Investment Trust is interested not merely in the yield of securities, but their capital value. Unlike the fixed or "unit" trust, it sells out some securities and buys others, both for the sake of better yield and appreciation of capital value. But an increase in capital value is never distributed among subscribers as profits; it is added to reserves for meeting possible depreciation of securities.

The advantage of Investment Trusts is three-fold: (1) the investor is able to spread his risk over a number of concerns; (2) capital flows into industries under expert guidance; (3) there is diversification of investments. In the case of countries like the United Kingdom, which also provide capital for less advanced countries, Investment Trusts spread risk over different countries, and also over different kinds of investments (plantation, shipping, iron and steel, etc).

Investment Trusts are usually founded by banking firms.

3. INVESTMENT AND SPECULATION

The Investment Trusts discussed above are agencies for investment, not speculation. The Unit or Fixed Trust buys its unit of mixed securities, once for all. The ordinary Investment Trust both buys and sells securities, but the profit arising from the appreciation of capital, as we have seen, is not distributed. Thus the speculative element does not enter into the operations of Investment Trusts.

There is a difference between speculation and investment. If I buy securities with the object of selling them again when they appreciate, I am a speculator. If I have bought securities for their yield, I will hold them, and I am an investor. The difference between speculation and investment would thus seem to depend on what a person intends to do with the securities he has acquired.

Securities range in order of risk from ordinary shares of industrial companies, with highly variable yields, to fixed interest industrial securities, and gilt-edged Government bonds. One may buy any class of securities to hold, or to sell again at a profit.

In the United Kingdom the Post Office Savings Banks, the Trustee Savings Banks and National Savings Certificates attract the savings of people who want absolute security. Trustee Savings Banks can invest their funds only in Trustee securities, as defined by legislation. The deposits in Post Office Savings Banks are a floating obligation of the Government.

4. BUILDING AND OTHER SOCIETIES

The other British thrift organisations which deserve mention are: Building Societies, Friendly Societies, Collecting Societies and Industrial Assurance Companies. Building societies build houses, mostly for middle-class people, and in certain cases also for workers. The houses are paid for by instalments spread over a number of years. Friendly and other societies and organisations, such as those concerned with mutual aid in sickness, accident, unemployment, etc., accumulate large funds in the form of subscriptions, for which they seek a safe and profitable outlet. Collecting societies and Industrial Assurance Companies are mainly concerned with wage-earners' life assurance. Collecting societies have no share-holding capital and are mutual societies making no profits. Industrial assurance companies collect premiums from policy-holders by making house-to-house visits, the premiums being payable at intervals of less than two months. Life Assurance Companies deal with the general public.

Taken together, these thrift organisations possess very considerable resources, a part of which is available for meeting the long-term requirements of industry. When considerable funds exist outside the money-market, a part of which may at any time flow into industry, the Bank rate and other Central Banking devices for controlling credit, as we had occasion to note earlier, are less successful in their object than would be the case otherwise.

5. THE STOCK EXCHANGE

The stock exchange is not a market for new capital but for invested capital. Any one may buy a share, but for each purchaser of a security quoted on the stock exchange, there is a seller. If I invest Rs. 100 in a stock exchange security, an equal sum has been set free for investment by the seller of the security. Thus there is no addition to the total amount of investment—only invested capital has changed hands.

Issuing Houses.—New capital is raised in Britain by Issuing Houses. An Issuing House acts as an agent for raising capital. It may be doing so for the British or a foreign Government, or a Municipal Corporation, or a joint-stock company. An Issuing House may under-write an issue, in which case it becomes responsible for taking up that part of the issue which remains unsold. Very often there are sub-under-writers with whom the Issuing House shares the risk.

Under-writing is advantageous from the point of view of a new company, which thereby obtains funds for starting operations immediately, or without unreasonable delay.

New capital is invited by the issue of a prospectus. This is the oldest method. The prospectus must give accurate information as required by law; heavy penalties are prescribed for wrong or misdealing statements in a prospectus.

A second method is " offer for sale "—a financial corporation or syndicate buys out the whole of a new issue and offers it to the public, making a profit on the transaction. No formal prospectus is published. An " offer for sale " is a means of evading the law regarding the issue of a prospectus, which is not considered indispensable in the case of second-hand shares.

A third method is that of " stock exchange introduction," which dispenses with both a published prospectus and " offer for sale." The financial corporation which has bought up the whole of a new issue seeks permission from the stock exchange for the inclusion of the new shares in the stock exchange list, so that the shares might be bought and sold on the stock exchange. The London Stock Exchange Committee does not encourage the " introduction " of large issues. " Introduction " amounts to the placing privately of new issues, but it is an important method of capital issue. Figures of capital issues are published weekly in the *Economist*. During the week ending May 18, 1946, new money, amounting to over £1 million was placed by " Stock Exchange introduction."

6. BANKS AND LONG-TERM INVESTMENT

Before the Great Depression British joint-stock banks, as a rule, stood aloof from the long-term financing of industries—they lent money for short-periods only. But many firms, to which banks had lent money on short-term, were unable to repay the loans during the crisis of 1929-32. The banks, if they had insisted on repayment, would have started a liquidation of businesses on a large scale. They adopted the wiser course for themselves—they continued to make advances but turned their loans into debentures. Their own interests were safeguarded, for thereby they acquired the first claim on the profits of the firms concerned, but these firms were no longer able to raise fresh capital on favourable terms by the issue of shares—the prospective purchasers of shares knew that the banks, as debenture-holders, would claim the fixed rate of interest before the sharesholders got anything.

A difficult situation was created and the Bank of England had to intervene. The share-capital of the firms was reduced, and at the same time the banks were persuaded to moderate their claims. The result was that the banks became considerable shareholders. of these firms, in addition to being debenture-holders. The Bank of England also established a subsidiary known as the Securities Management Trust, and through this body, and also in other ways, the Bank of England played an important role in providing long-term capital for the reconstructed industries.

The Bank of England has been always concerned in the investment of British capital in over-seas countries, for the outflow of capital affects the rate of exchange. The interest of the Bank of England in industrial reconstruction in England, and the acquisition by British joint-stock banks of a financial interest in industrial undertakings, constitute a departure from their old policy of non-intervention.

7. GERMAN SYSTEM

As we have seen, British banks led, by the Bank of England, now take a share in the long-term financing of industry. Before 1931 there was a strong contrast in this respect between German and British banking. In England the Issuing Houses found new capital ; in Germany there were no Issuing Houses, and German joint-stock banks met both the short-term and the long-term requirements of industry. There was no specialisation in banking in Germany (*fuer Spezialbank in Deutschland kein Raum,* says the *H.W.B.*)[1], for which reason German banks were called " universal. " They did everything—drew bills, discounted bills, made loans against collateral, granted short-term and long-term loans in the current account, acquired shares and bonds, issued letters of credit and did other banking business.

In meeting the requirements of industries forms of the usual short-term credit were employed. A loan was made by a bank by discounting short-term (three months') bills. When the bills fell due they remained unpaid, and a new bank acceptance was prepared and discounted to pay the old debt, which, in other words, meant that short-term credit was transformed into long-term credit.

At times, as has been seen in several countries, the pace of industrial progress is accelerated by inventions and other favourable conditions. Where does the capital required come from ? Naturally from the banks ; long-term loans for block fill the gap until new undertakers' capital is formed to extinguish the loans. Such loans for block have an economic justification.

They may be called " interim block credit " (Zwischenanlagecredit). Credit in such circumstances is the fore-runner of one's own capital formation, that is, the profits of the undertaking financed will enable in time the loan to be paid off. But they may not, and this is the element of risk in such transactions.

In regard to the provision of capital for new enterprises the *H.W.B* says :

" If the banks participate in the foundation of joint-stock companies, they are able to do so because they can recover the capital lent with profit by selling the shares. In fact, it has always been tempting for bank capital to call new undertakings into being and a great many undertakings owe their existence to co-operation between share-capital (Aktien), Stock Exchange dealings, and bank capital."[2]

But bankers' technical knowledge of industry is limited and they are generally inclined to withdraw from the foundation of new enterprises in the real sense. Still, bankers in Germany and

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[1] Vol II, p. 138.

[2] *Ibid.*, p. 152.

America maintained their connection with the capital requirements of the business world in one way—when an individual proprietor wished to be transformed into a joint-stock company, banks helped him in procuring the required capital. The connection between the business of financing (*Finanzgeschaeft*) and the ordinary business of a bank is unquestionably of very great advantage in the industrial development of a country.

Writing in the *Witrschaftsdienst* of 14th August, 1931, Herr Berthold Schwartz thus described the relation of German banks to industry :

" The mixed clientele of the German credit bank connects the function of deposit banks in providing working capital with the function of an Issuing House and a financing bank. The current account advances (*Kontokorrentgeschaeft*) form the hinge (*Angelpunkt*) of credit relations with industry, whose need for block is met first by discounting bills, or simply by means of credit in the current account. The final financing follows later, through the issue, mostly by a Konsortium, of shares or bonds of the undertakings to which credit had been granted. The sums advanced are thus recouped and the position of the bank and the industrial undertakings consolidated."

The close association of German bankers with German industry did not escape Lenin's attention. The association took the form of a " personal union,"[3] the bankers being represented on the directorates of the industrial enterprises they financed. There was an inter-linking of industrial and banking capital, giving rise to what is known as " finance capital." Lenin contended that industry was passing under the control of bankers, and since there was a marked tendency towards concentration in banking, the whole economic life of the country tended to be controlled by a small but extremely powerful financial oligrachy.

German banking passed under Government control in the period of reconstruction and recovery, 1933-38.

8. FRANCE

As in all countries, the money market in France is a market for short-term loans ; the capital market provides long-term finance. But the two are inter-connected, as there are debtors and creditors who are able to operate in both.

How are industries financed ?

The process consists of two phases. First, there are banks which directly participate in industry. They extend credit for moderate and long periods to a new firm, or an old firm planning expansion, and for this receive a number of shares which give the lending bank a certain right of control over the firm concerned. After a few years, when the firm is working and showing profits, the second phase begins—the offer of stocks and shares for public subscription. The lending bank may retain some of the shares which it had acquired, but it disposes of the greater part of the issue, either by itself or with the co-operation of other banks. Thus the bank again places itself in funds and is ready to finance another venture. That is how banks serve as a link between savings and investment.

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[3] *New Data for Lenin's Imperialism* by Volga and Mendelsohn, pp. 96-8.

Three types of banks take a share in the financing of industry : – 1. *Etablissements de Crédit,* 2. *Banque d' Affaires,* and 3. Provincia and Local Banks.

The *Etablissements de Crédit* started with mixed banking but gradually changed over to deposit banking, leaving the financing of industries to subsidiary institutions which they founded. These subsidiaries could always rely for support on the mother-bank.

The *Banque des Affaires* are divided into three groups, *The Haute Banque,* the *Banque des Affaires* in the narrow sense and *Sociétés de Participation.*

The *Haute Banque* was associated with the development of French industry in the 19th century. It comprised the financial houses founded by big capitalists like Rothschild Frères, Mirabaud et Cie, Holinguer et Cie and others.

Banque d' Affaires in the narrow sense is a real financing institution. Examples are Banque de Paris et de Pays Bas (1872), Banque de l'Union Parisienne (1904) and Crédit Mobilier Francais (1902). They work with large capital and reserves, and their time liabilities are almost equal to the demand liabilities.

In course of time, particularly after the Great War, the *Banque d' Affaires* began to take over more and more the character of German universal banks.

The *Sociétés de Participation.*—Like *Banque d' Affaires,* financing is the chief function of these institutions, but unlike *Banque d' Affaires, Sociétés de Participation* limit their activities exclusively to participation in industry and neglect other banking business. " Indeed some of them devote themselves to only one form of participation, namely, the acquisition of shares so as to be able to control a group of undertakings."[4] Sometimes they are interested only in a particular branch of an industry of which they possess specialized knowledge.

The *Sociétés de Participation* may be divided into two groups, (*A*) those founded by financing banks, and (*B*) those established by industries. Group (*A*) is more important.

Group (*A*). The institutions possess a specialised knowledge of the industry which they finance. The mother institution sometimes possesses a number of such daughter institutions in different branches of industry, which enables it to balance the risk of loss against the chances of gain. By investing a comparatively small amount, the mother institution acquires the maximum amount of influence over industrial undertakings. For example, suppose a bank owns 50 per cent of the share-capital of a participating society, and this society owns 50 per cent of the shares of an industrial firm. In such a case real control lies in the hands of the bank.

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[4] *W. A.* for January 1937, p. 17.

Group (*B*).—These associations are created by industrial groups. They are small in number and work in secrecy so that not much is known about their activities.

Provincial and Local Banks.—The field of activities of these banks is restricted to a town, or, in the case of a Provincial Bank, to a few districts (*Departments*). These banks were originally commercial banks, but not content with employing their funds in discounting bills, they turned their attention to the development of the industrial resources of their locality by granting long-term credits in the guise of short-term credit. They succeeded, for example, in promoting the commercial and industrial development of Lorrain by granting credit in the usual current account, which was renewed again and again for years. By 1929, however, the relations of Local and Provincial Banks with the capital market had become weaker and those with the money-market closer.

How Industrial securities are marketed —When a bank disposes of the securities it had acquired in participating in the foundation or expansion of an undertaking, its participation ends. How is that effected ?

Banques d' Affaires and *Etablissements de Credit* co-operate in the marketing of securities. The preliminary arrangements are made by a *Banque d' Affaires* and the actual sale carried out by *Etablissements de Credit.*

When the amount of the issue is large, the *Banques d' Affaires* form a Konsortium (*Syndicat Financier*). Members of the Syndicate take over the whole risk (or issue) and divide it among themselves. Sometimes only a guarantee is given that the whole issue will be placed with the public, the portion remaining unsold becoming the property of members of the Syndicate. The guarantee reduces the need for cash on the part of the Syndicate.

There are two methods of dividing the unsold issue among the members of the Syndicate. In the *Syndicate ā a Parisienne* the unsold issue is divided according to the share of each member in the Syndicate. Thus if a member had undertaken to sell one-third of the issue, he would be assigned one-third of the unsold issue, even though he had succeeded in selling his original allotment. In the *Syndicat ā la Lyonnaise* regard is paid to the success or failure of each member in selling his original allotment. If a member fails in his assigned task, other members of the Syndicate have not to suffer much on this account.

There are three methods of marketing : (1) asking the public to subscribe, (2) sale over the bank counter, (3) sale on the stock exchange. Recourse is had to the stock exchange when foreign securities, which are already quoted on foreign stock exchanges, have to be introduced to the French public. In the case of purely domestic securities the first two methods are usually employed. The financing institutions possess few branches, and therefore the sale over bank counters takes place in *Etablissement de Credit* which possess a net-work of branches all over the country.

9. INDIA

From what has been said above the reader should have a fairly clear idea of industrial finance in England, Germany and France. In our own country, apart from the Managing Agency system, industrial finance is completely disorganised—it may be said to be non-existent.

The Managing Agency system is peculiar to India. It was pronounced by the Central Banking Enquiry Committee of 1931 to be an 'unqualified success' in Ahmedabad. In Calcutta the system prevails in jute, coal, cotton and tea. In Bihar the Managing Agents are active in coal-mining, iron and steel, mica and the sugar industry. The Managing Agents have promoted the development of the Bombay Cotton mill industry. In Bombay, as elsewhere in India, a certain proportion of the capital of a new concern is obtained by the issue of shares to the public and the rest by means of deposits and funds supplied by the Managing Agents.

At one time Ahmedabad mills used to attract deposits from rural areas. In Calcutta the Managing Agents are in most cases the founders of the concerns which they manage and are responsible for financing the concerns. They meet the requirements both for bloc and working capital either by raising share capital or arranging with banks, or other financiers, or supplying it themselves. The progress of our industries owes a great deal to Managing Agents. But the system has also its drawbacks. Sometimes the Managing Agents trade and speculate, and their weakness reacts on their concerns. In Bombay, in a time of difficulty, the Managing Agents have been known to turn their loans to the mills into debentures, with the result that the shareholders suffered heavy losses. The system works well when industries are prosperous, but not so well in crises. "We suggest," wrote the Central Banking Enquiry Committee, "that attempts should be made to make industrial enterprises in India less dependent on this system for future development. The establishment of direct friendly relations between industrial companies and commercial banks is desirable, especially in view of the capital demands that are likely to arise in connection with mergers and reconstruction which may follow the present economic depression." [5]

The establishment of an industrial bank, with a paid-up share or debenture capital high in proportion to its total business, was recommended by the Industrial Commission as far back as 1916-18. Even more important than the establishment of an Industrial Bank, or Industrial Finance Corporation or Corporations, is the development of thrift organisations. Agricultural capital lies scattered in hoards throughout the country, and the savings of the people, both in towns and villages, are invested largely in jewellery. National habits change very slowly, but industrialization may be expected to create societies and organisations which encourage thrift. A very strong argument for industrialisation is that industries yield dividends which are used for fresh investment. Secondly, undistributed profits, in the shape of reserve funds, create new capital automatically. Very probably in the India of the future Government will play a far larger part in the collection of savings than it does at present through the Post Office Savings Banks and Savings Certificates. We shall have to wait long before Friendly Societies, Building Societies, Industrial Assurance and similar thrift organisations become of any importance in our country as a source of new capital. The Life Assurance business is growing, but it has touched only the fringe of the population.

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[5] Para 353, p. 280 of the Report,

PART IV. THE FINANCIAL MECHANISM OF PLANNING.

CHAPTER XVIII

MONEY AS MOBILIZING AGENT

1. FUNCTIONS OF MONEY

To understand the role of money in a planned economy we have to begin from the very beginning. What are the functions of money ? From the individual point of view money is general purchasing power. It is a generally accepted medium of exchange and therefore a common denominator of value. Where all values are expessed in terms of money, the consumer is able to compare values and spend his money to the best advantage. Since money commands goods and services in exchange for itself, it is stored-up purchasing power. One may spend one's entire income in the present, or save part of it for the future. Assuming there is no change in general prices, money saved will represent the same amount of general purchasing power in the future as in the present. Finally, purchasing power may be borrowed and lent in the form of money.

In regard to these functions of money the State may be viewed as an individual who acquires an income largely through taxation, and who, in order to carry on the administration, exchanges the receipts from taxation and other sources for various goods and services. Like an individual the State may save part of its annual income, or accumulate surpluses to be spent in deficit years. The State may also borrow money, or anticipate its income.

The State also coins money. But ignoring "created money," the role of the State in money matters is passive. A mint for the coinage of gold or silver is established, and the supply of money automatically adjusts itself to the demand for it. If gold coinage is considered wasteful, paper may be substituted for gold in circulation, but care is taken to see that the paper circulation fluctuates precisely as a gold circulation would.

Such is the *laissez faire* view of the functions of money. The role of the State in regard to money consists in maintaining a supply of uniform currency of undoubted purity. If money were coined by any one who chose to do so, great confusion would prevail, as was the case in India before the silver rupee issued by the East India Company was made legal tender in 1835 throughout the territories administered by the Company. A great variety of coins circulated in the country, and their values must have been frequently changing according to the state of their purity. Free competition in coining money is not conceivable and from a very early time coinage has been regarded as a royal function.

We have also seen that free competition in note-issue is also not desirable. "Free trade in banking is free-trade in swindling," banking being interpreted as the privilege of note-issue. In all countries, as we have seen, notes are issued by a single institution, the Central Bank. The Central Bank may so manage the note-issue that the notes only take the place of the gold that would otherwise have been in circulation.

2. PUTTING INDUSTRY INTO MOTION

The functions of money outlined above make it clear that money is like the wheels of industry, or the oil which keeps the industrial machine running smoothly. Is money anything more than that? Adam Smith says:

> "In order to put industry into motion three things are requisite; materials to work upon, tools to work with, and the wages or recompense for the sake of which the work is done. Money is neither a material to work upon, nor a tool to work with; and though the wages of the workman are commonly paid to him in money, his real revenue, like that of all other men, consists, not in the money, but in the money's worth; not in the metal pieces, but in what can be got for them."[1]

Wages may be paid in money, but what the labourer wants, and ultimately turns his money wages into, is his subsistence. Even where there is no commonly accepted medium of exchange, or money, goods are produced, bartered and consumed. In this sense money does not put industry into motion.

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[1] *Wealth of Nations*, Book II, Chapter 2.

3. PAPER MONEY IN SCOTLAND

But Adam Smith also noted, with surprise bordering upon incredulity, the effect of paper money in creating new wealth. He says:

> "I have heard it asserted that the trade of the city of Glasgow doubled in about fifteen years after the first erection of the banks there; and that the trade of Scotland has more than quadrupled since the first erection of the two public banks at Edinburgh, of which the one, called the Bank of Scotland, was established by act of Parliament in 1695; the other, called the Royal Bank, by royal charter in 1727. Whether the trade, either of Scotland in general, or of the city of Glasgow in particular, has really increased in so great a proportion, during so short a period, I do not pretend to know. If either of them has increased in this proportion, it seems to be an effect too great to be accounted for by the sole operation of this cause. That the trade and industry of Scotland, however, have increased very considerably during this period, and that the banks have contributed a good deal to this increase, cannot be doubted."[2]

Paper money, in one form or another, performed miracles in Russia and Germany in the nineteen thirties, to which we shall refer later. That it may create new wealth by putting industry into motion is clear from the contribution "banking," in the sense of note-issue, made to the trade and prosperity of Scotland in general and of the city of Glasgow in particular during the period mentioned by Adam Smith.

How does paper money create new wealth? Let us assume that idle factors are in existence, or "full employment" does not exist. Land, representing all kinds of natural materials, and labour, are the two original factors of production. If means could be found of setting labourers to work, they would make tools and implements, which might be used to increase the supply of food, clothing and shelter. We limit the discussion to these three necessaries of existence, and further assume that to augment their supply neither imported skill nor imported technical equipment is necessary.

A country may have no lack of resources, human and material, and yet remain poor because industry cannot be put into motion. Industry is put into motion when the labourer is set to making tools and employs them in creating wealth. But the labourer can only be induced to work by the offer of a material reward. Let money be found for wages, and industry will be put into motion.

But real wages, it will be said, consist not in money but goods. If we wish to create more goods, from somewhere we should obtain a store of goods which may be used for paying wages.

But take unemployed workers. In their state of unemployment they must, though in an inadequate measure, have been supplied with the necessaries of existence, or they would have been dead. When they begin to work, and wages are paid to them in " created money," their wages represent purchasing power, but the new demand created for food, clothing and shelter is not as great it would have been if the new workers, in their state of unemployment, went about without any clothing, lived without any food, and slept anywhere except in houses.

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[2] *Ibid.* Book II, Chapter. 2.

Assume, for the sake of simplicity, that necessaries of existence are created without delay, or as soon as the labourer begins to work and to earn wages. The creation of new wealth will, in such a case, proceed *pari passu* with the creation of new money. The new workers create their own subsistence. All unemployed and under-employed workers may be fully employed, through "created money," without causing general prices to rise. The quantity of money in circulation will increase, but as general purchasing power increases in the form of money, the supply of goods also increases, and so long as the creation of new money does not outstrip production, there is no reason why inflation should appear.

But our assumption is unreal. Goods take time to produce, while wages are paid daily, weekly or monthly. Even then the problem is not insoluble. We have seen that the net increase in demand can never be equal to the new purchasing power created, except on the assumption that the community, whether through public or private organisations, extended no aid to the unemployed.

That never happens in a civilized community. But when there is a considerable interval of time between the payment of wages and the production of goods on which the wages will be largely spent, the supply of such goods may be controlled and rationed. Ultimately new money will be represented by new goods. We, of course, assume that new money is not created to finance the production of guns. What is wanted is more butter, and ultimately there will be more butter. The supply may be short for a time when arrangements are being made to put industry into motion. Ration butter, then, during this period. The shorter the period of production and the greater the effectiveness of labour, the more negligible would be the effect of "created money" in raising general prices.

That is how we may understand the invigorating effect of "banking" on trade and industry in Scotland which Adam Smith mentions. There were unemployed factors which were set to work by bankers in creating new money.

4. DAEDALIAN WINGS OF PAPER MONEY

Adam Smith recognised the advantages of a paper circulation, but only so far as it enabled a community to economise gold and silver. A highway through the air would be advantageous in so far as land now used for highways could be utilised for purposes of cultivation.[3] This is not a recognition of the great social function of money as a mobilizing agent, a means by which the State may banish unemployment and encourage a fuller utilization of natural resources. Adam Smith refused to fly on the Daedalian wings of paper money; he preferred to remain standing "upon the solid ground of gold and silver." Suppose, said Adam Smith, there was a war in which the enemy was successful in seizing the treasure which served as the basis of credit. Why, then, everything would come to an end. But everything also comes to an end when the enemy, by air-bombing, destroys all or most material means of waging war—what happened in Germany in the last year of the war.

5. GOLD AND SILVER

If, sharing Adam Smith's distrust of paper money, we rule it out for creating conditions of full employment, we must find gold and silver to take the place of paper. Gold and silver serve precisely the same purpose, and in precisely the same way when they are used to pay wages. . Wages paid in paper money possess no intrinsic value while gold and silver do, but, as money, gold and silver will cause an increase in demand, when they come into circulation, just like an equal quantity of "created money." "Created money" is easily provided by Government, but for new supplies of gold and silver we must rely on foreign countries, if we possess no gold and silver mines of our own.

The philosopher David Hume noted how, when gold and silver began to flow into a kingdom, everything took on a new face, labour and industry gained new life, the merchants became more enterprising and even the farmer followed "his plough with greater alacrity and attention." Why ? The explanation is given in Hume's own words below.[4]

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[3] "The gold and silver money which circulates in any country may very properly be compared to a highway, which, while it circulates and carries to market all the grass and corn of the country, produces itself not a single pile of either. The judicious operations of banking, by providing, if I may be allowed so violent a metaphor, a sort of waggon-way through the air, enable the country to convert, as it were, a great part of its highways into good pastures and cornfields, and thereby to increase very considerably the annual produce of its land and labour. The commerce and industry of the country, however, it must be acknowledged, though they may be somewhat augmented, cannot be altogether so secure, when they are thus, as it were, suspended upon the Daedalian wings of paper money, as when they travel about upon the solid ground of gold and silver. Over and above the accidents to which they are exposed from the unskilfulness of the conductors of this paper money, they are liable to several others, from which no prudence or skill of those conductors can guard them." *Wealth of Nations*, Book II, Chapter 2.

[4] "Here are a set of manufacturers or merchants, we shall suppose, who have received returns of gold and silver for goods which they sent to Cadiz. They are thereby enabled to employ more workmen than formerly, who never dream of demanding higher wages, but are glad of employment from such good paymasters. If workmen become scarce, the manufacturer gives higher wages, but at first requires an increase of labour; and this is willingly submitted to by the artisan, who can now eat and drink better, to compensate his additional toil and fatigue. He carries his money to market, where he finds everything at the same price as

There is no immediate or proportional rise of prices in Hume's illustration because there is no "full employment" to begin with, and there cannot be any inflationary rise of prices if production increases side by side with the increase in the quantity of circulation.

It will be seen that the problem of the rise of prices does not change because we have substituted gold and silver for "created money." And yet there are people who would not object to industry being put into motion by imported gold and silver, but who are horrified by the proposal to use "created money" with the same object.

6. MERCANTILIST VIEW OF MONEY

There is a strong contrast between Adam Smith's view of gold and silver and that held by the Mercantilists, whom Adam Smith criticizes so severely in his *Wealth of Nations*. "The nature of money is that it produces nothing; it is a metal rich, but sterile,"[5]—that was the opinion expressed by "most learned doctors" of the Sorbonne who were formally consulted by the Government of Louis XIV in 1671 on the advisability of lowering the maximum legal rate of interest. Money being sterile, any rate of interest is improper. In the passage from Adam Smith that we have quoted before, the question is not that of the rate of interest, but of putting industry into motion. Money is sterile so far as that also is concerned—industry is put into motion, according to Adam Smith, not by money, but by materials and tools and implements, and money belongs to neither category.

The Mercantilists, on the contrary, were aware of the quickening effect of gold and silver on trade and industry. Some of them may have expressed themselves crudely, implying that the prosperity of a country depended on the heaping up of gold and silver in the country. But this is a wrong interpretation of their views. They valued gold and silver, not for their own sake, but for their beneficial effects in

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formerly, but returns with greater quantity and of better kinds, for the use of his family. The farmer and gardener, finding, that all their commodities are taken off, apply themselves with alacrity to the raising more; and at the same time can afford to take better and more cloths from their tradesmen, whose price is the same as formerly, and their industry only whetted by so much new gain. It is easy to trace the money in its progress through the whole commonwealth; where we shall find, that it must first quicken the diligence of every individual, before it increase the price of labour.

And that the specie may increase to a considerable pitch, before it have this latter effect, appears, amongst other instances, from the frequent operations of the French king on the money; where it was always found, that the augmenting of the numerary value did not produce a proportional rise of the prices, at least for some time. In the last year of Louis XIV money was raised three-sevenths, but prices augmented only one. Corn in France is now sold at the same price, or for the same number of livres, it was in 1683; though silver was then at 30 livres the mark, and is now at 50. Not to mention the great addition of gold and silver, which may have come into that kingdom since the former period." (*Essays*. Of Money).

[5] *Colbert* by C. W. Cole, Vol I, p. 2.

circulation. A German Mercantilist, Von Hornigh, for example, wrote in 1707 :—

> "Fourthly: gold and silver, when they have once been acquired by a country, either through its own production, or from foreign countries through industry, must not, so far as that may be possible, be permitted to go out, on any account and in any manner; nor should it be permitted to hoard them in chests or boxes, but they should be always in circulation ; they should not also be allowed to be manufactured into forms which destory them and render them incapable of being used to advantage."[6]

Von Hornigh (1638-1713) expressed these views in a book entitled "*Oesterriech Ueber Alles*" (Austria Over All) whose first edition appeared in 1707. The work had a large circulation and it is stated that Kaiser Joseph II of Austria implicitly trusted it.

It will be noted that Von Hornigh would not let new gold and silver be hoarded or turned into ornaments. It is by going into circulation that new money augments production and creates new employment.

C. W. Cole in his *Coblert and a Century of French Mercantilism* quotes an anonymous *memoire* dated June 2, 1669, declaring that the purpose of foreign commerce is the "abundance and quantity of money." That was the conviction of all Mercantilists, but what deserves special notice is the statement that the way to make commerce flourish is " to drain, improve and put under cultivation waste-lands and to clear wooded ones, to establish manufactures, to grant privileges to merchants and workers."[7] In themselves gold and silver are indeed barren, but they are not barren when employed to bring new land under the plough, and to develop old and to create new industries. That is what gold and silver can do, and therefore it is not a matter of indifference whether economic conditions are such as lead to an import or export of gold.

7. SUMPTUARY LAWS

The bullionist national policy of Colbert had three objects: " first, to increase the money in circulation by attracting it from other lands : second, to keep it in the kingdom by preventing its export ; third, to give people a chance to make a profit from the money in the realm."[8]

People do not get a chance to make a profit from new bullion if it is turned into gold and silver vessels or consumed in other forms. One of Colbert's memoranda reads : " Examine the means to reduce the over-large quantity of silver which is made into vessels."[9] But Colbert supported such luxury industries as the manufacture of silks, laces, mirrors, etc., for they created employment.

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[6] *Lesestuecke* etc edited by K. Dehl and P. Mombert. *Vom Geld I*, 3rd edition (1920), p. 24.

[7] Vol. II, pp. 543-44.

[8] Colbert, Vol I, p. 337.

A royal declaration of April 6, 1672 began with the preamble:

> "As the abundance of gold and silver in commerce is of the surest marks of the good order and prosperity of a State, so the bad use made of these metals in the superfluity of private families is a certain mark of their disorder and of the ruin which is almost inseparable from it. This is what sumptuary laws have sought to stop in the best-ordered States."[10]

Adam Smith condemnd sumptuary legislation. He regarded it as the highest "impertinence and presumption" in kings "to watch over the economy of private people, and to restrain their expense, either by sumptuary laws, or by prohibiting the importation of foreign luxuries."[11]

8. FRUGALITY *VERSUS* PRODIGALITY

Sir Dudley North was a free trader as opposed to the Mercantilists who advocated restraints on foreign trade. But, writing in 1691, he expressed sentiments in his *Discourses upon Trade* which Adam Smith would have thoroughly disapproved. He anticipated Adam Smith in condemning sumptuary laws, not because he thought it impertinent on the part of the King to regulate private expenditure, but because sumptuary laws had a discouraging effect upon industry, so that "the growth of Wealth in the Nation is hindered; for that never thrives better, then when Riches are tost from hand to hand."[12] "The meaner sort seeing their Fellows become rich, and great," he added, "are spurr'd to imitate their industry. A Tradesman sees his Neighour keep a Coach, presently all his Endeavours is at work to do the like, and many times is beggered by it; however the extraordinary Application he made, to support his Vanity, was beneficial to the Publick, tho' not enough to answer his false Measures as to himself."[13]

When riches are tossed from hand to hand, money is active in creating new wealth. Gold and silver are then in circulation, and not wasted in the form of ornaments or plate.

In regard to consumption, Sir Dudleigh North's view finds support in the modern theory of the Multiplier, which lays emphasis on greater spending as a means of adding to the national income. National income, as we have seen, increases more rapidly, induced private investment or the *Relation* remaining the same, when the propensity to consume is 9/10 than when it is 1/2. Greater frugality

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9. *Ibid., Vol II*, p. 545.
10. *Ibid., Vol II*, p. 546.
11. *Wealth of Nations*, Book II, Chapter, 3.
12. P. 27.
13. Pp. 27-28.

means a higher propensity to save and a lower propensity to consume. The modern theory of increasing national income and wealth does not view every prodigal as " a public enemy," and every frugal man as " a public benefactor," as Adam Smith did.[14]

9. MONEY IN A PLANNED ECONOMY

The function assigned to money in a planned economiy is more akin to that assigned to it in the Mercantilist view of money than in the classical theory of money. But there is an important difference. Paper money takes the place of gold and silver. The Mercantilists regulated trade so as to induce a steady flow of gold and silver into the country. A modern planned economy has no need to attract bullion from other countries to create employment. Money can be created for the purpose either in the form of currency notes, or bank credit. Gold and foreign exchange reserves are required to pay for surplus imports of goods and services. But in a planned economy such surplus imports can be reduced to the barest minimum. Modern States, as we have seen, employ more effective measures of trade control than were in general use in the past.

Assume, for the sake of argument, that when planning begins in India, we have adequate means of paying for such imports of services and technical equipment as are not paid for by exports of goods and services. We may add to our gold reserves by mobilizing gold hoarded in the form of ornaments and other forms. As for the rest, what do we want gold and silver for ? Surely not as a backing for paper money ? The idea that paper money represents a certain quantity of gold belongs to the past. Paper money actually in circulation in India ceased to represent a definite gold value on 21st September, 1931. Why should that old dignity be conferred upon it again ? In fact, since 1893, money in India has ceased to have an intrinsic value—no one can pretend that the silver rupee passes from hand to hand in circulation because it is made of silver. The paper rupee, possessing no intrinsic value at all, circulates side by side with it. The masses have become accustomed to paper, and the silver rupee might as well totally disappear from circulation.

Gold and silver are not required as a backing for paper money, given a National Government enjoying public confidence. The Mercantilists were mistaken in thinking that gold and silver were needed to spur men to activity. Paper money will do that quite as well. It did so during the war.

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[14] " Whatever, therefore, we may imagine the real wealth and revenue of a country to consist in, whether in the value of the annual produce of its land and labour as plain reason seems to dictate; or in the quantity of the precious metals which circulate within it, as vulgar prejudices suppose; in either view of the matter, every prodigal appears to be a public enemy, and every frugal man a public benefactor." (*Wealth of Nations*, Book II, Chapter 3).

10. FOREIGN BORROWING

The Bombay Plan is estimated to cost Rs.10,000 crores, of which Rs.3,400 crores is "created money." Actually this may turn out to be an under-estimate. The balance of trade may not yield Rs.600 crores; "created money," may as well take the place of foreign loans, amounting to Rs.700 crores. The idea that backward regions cannot develop their resources without foreign loans is also a relic of the past, like the full gold standard.

Foreign loans create political complications. Economic reasons against the use of borrowed foreign capital are not less strong. When the burden of foreign obligations is heavy, the debt services are costly, and a high rate of foreign exchange has to be maintained as a measure of relief. Having won freedom from the slavery of foreign capital, we should not lose it again.

Foreign gold is not required to set people to work in this country. In the example given by Hume gold from Cadiz imported by merchants makes the wheels of industry revolve faster. A planned economy possesses the wealthiest of merchants, the State, with unlimited stores of purchasing power. With paper money the wheels of industry can be made to revolve as fast as any one may desire.

11. INFLATION

"Ah!" we hear the reader exclaim. "But this is inflation."

What is inflation? If any increase in the quantity of money in circulation is inflation, then planning without inflation is impossible. For in our planning created money is indispensable. India cannot be rapidly industrialised without created money amounting to several thousand crores coming into circulation. But it is a mistake to think that "created money" must raise prices. It did during the war. But planning for war and planning for peace are different.

In the first place it should be clearly understood that an increase in the quantity of money as such raises prices only when the public loses confidence in paper money. When paper money begins to depreciate, for want of confidence, every one endeavours to get rid of it as quickly as possible. Its value may fall even more rapidly than the increase in its quantity.

There was no loss of confidence in paper money during the war, and yet prices rose. Why?

Except where there is loss of confidence, an increase in the quantity of money in circulation can act on prices only through the channels of supply and demand. If demand for goods and services in general increases, the supply remaining the same or increasing in a smaller measure, prices must rise. War increases the demand for all kinds of goods and services enormously, and a shortage for civilian consumption is the result. If the supply of petrol cannot be suddenly increased to meet the additional war demand, existing supplies must be diverted from civilian to war purposes. Civilians must go short, for the needs of war are paramount. In the absence of rationing the price of petrol will rise.

The war demand, directly and indirectly, affects all kinds of goods and services. Paper money is used to divert supplies from peace-time to war employment and, when price control is inefficient, it seems as if the rise of prices is directly caused by increase in the quantity of inconvertible paper. But the real cause is scarcity, enhanced by shortage of imports, inevitable in war-time.

Assume, for the sake of argument, that there is no increase in the quantity of money in circulation, and that the Government simply commandeers such supplies of wheat, cloth, sugar, tea, jute, leather, oil and other goods as it requires. That was how military supplies were obtained by generals in India sometimes in the past. Military demand, no matter whether it is met through or without the intervention of money, must reduce supplies for civilians. If there is a shortage of wheat caused thus, its price must rise—for, thanks to inequality in the distribution of wealth, some of the civilians would be able, by bidding more, to get their accustomed quantities, forcing others to consume less. The poor may even die of starvation. Scarcity would be the cause of death, not the fact that Government had paid for the wheat it purchased for the Army. Similarly, millions of people may have to go about practically naked because more and more cloth is being turned into uniforms for soldiers. It is, again, immaterial whether Government pays or does not pay for cloth diverted to military purposes. Even without being enriched by war-expenditure, certain sections of the population are in a position to offer more for cloth than others, and if the supplies left for civilian consumption are inadequate, by bidding more these sections of the population will raise the price of cloth.

The function of price is to equate demand and supply. When any commodity grows scarcer, the supply is equated to demand by a rise in price, just as when a commodity grows less scarce, the price falls to equate demand and supply.

But war demand may be met without a considerable rise in prices. That was the case in England and the United States. A comprehensive system of price-control, combined with rationing, may spread the shortage evenly on all civilian consumers.

12. INFLATION IN PEACE-TIME

But created money in peace-time is different from created money in war-time. During a war human and material resources are used for purposes of destruction. An increase in the quantity of the circulation is accompanied by a decrease in the supply of goods and services for civilian purposes.

Similarly, when a country is preparing for war, guns can be had only at the cost of butter—more guns mean less butter.

No such choice confronts a people in peace-time reconstruction. The number of projects which can be completed at a heavy cost at the end of a very long period, need not be many. In a poor country like our own, the greater proportion of the expenditure of the vast majority of the population is on necessaries of life, such as bread and cloth. "Created money" used to augment the supply of necessaries will produce quick results. An increase in the quantity of money which is balanced by greater production is not inflation.

CHAPTER XIX

PAPER MONEY *versus* BANK CREDIT

Paper money employed to create "full employment" may have one of the two forms—notes or bills, notes representing Government paper money and bills representing bank credit. Russian planning employed notes, and German planning bank money. In both cases the object of planning was achieved. Planning has made Russia one of the leading industrial countries of the world. It helped Russia to win the Great War. Nor can any doubt be entertained about the success of German planning between 1933-38. Both the Russian and German experiments are of interest to us, as they provide brilliant illustrations of the role of money in a planned system—that of putting industry into motion.

1. THE ROUBLE

Between 1928 and 1940 a huge programme of armaments and reconstruction was carried through in Russia with internal resources alone. At the beginning of the war in 1939 Russia had no foreign debt.[1]

New construction was financed by loans and taxes, and chiefly by paper money.

What was at the back of the rouble ? Nothing but the credit of the Soviet Government and the faith of the people in their Government. Soviet paper money is not backed by gold. The charter of the State Bank requires a 25 per cent firm cover for the currency circulation, but in 1932 the State Bank ceased to pay heed to this requirement.[2] Even without any gold cover Soviet currency, it was claimed by Stalin, was the most stable currency in the world. Why ? Because it was backed by goods held by the Soviet Government and the capital enterprises of the country. Soviet paper money was in fact inconvertible, and it could not be converted by selling Soviet enterprises, *e.g.*, railways, docks, power stations, armament works to foreign powers.

In emphasizing the stability of Soviet currency Stalin is reported to have once "profoundly" observed : "Is it not a fact that with this currency we built Magnitostroi, Dnieprostroi, the Stalingrad and Kharkov tracter works, the Gorki and Moscow automobile works, hundreds of thousands of collective farms and thousands of State farms ?"[3]

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[1] *U.S.S.R. Speaks For Itself*, Vol I, Industry, p. 20.

[2] *Soviet Labour and Industry* by L. E. Hubbard, p. 245n.

What would have Adam Smith said about Stalin's claim? The claim must be admitted. The capital enterprises created by the Soviet rouble, representing no gold whatsoever, are a reality. Paper money, then, can create capital. But how ? To build capital enterprises a country must have unemployed labour and unexploited material resources—that is all. Paper money in Russia paid wages, which put industry into motion—according to a pre-determined plan. In itself paper money is not capital, but by mobilizing the agents of production it has a capital-building effect.

Unfortunately information about the growth of the note-circulation in Russia under planning is not available. There was a very considerable rise of prices and real wages of large classes of workmen may not have risen, as is claimed by Soviet authorities ; they may have even fallen.

The question will remain undecided, for a correct judgment can only be formed on the basis of authoritative statistics, which have been withheld by the Soviet Government.

That Russian planning subjected the masses of the people to hardship may be admitted. But, then, it succeeded in industrializing Russia within an incredibly short period of time. There is no planning without tears, as the joint authors of the Bombay Plan have frankly stated. There is a price to pay for everything. The main question is whether, under given conditions, paper money will create "full employment." Assuming that the people are willing to bear hardship in the present, will paper money rebuild economic life ? The Russian experiment enables us to answer the question in the affirmative.

It is possible that inefficiency and waste unduly enhanced the sufferings of the people. Secondly, Russia, like Germany, was feverishly preparing for war ; armaments are not consumable commodities like wheat, cloth and butter. One can imagine the very great increase in the supply of consumers' goods that would have taken place if productive power, devoted to armaments, had been applied to peaceful purposes. Thirdly, Russia was obsessed with construction megalomania. Giant enterprises were undertaken which involved the locking up of capital for very long periods. How big some of these projects are may be gathered from an example given by Mr. Wendel Wilkie in *One World*. When in Kubishev he was told of plans to dam a great bend in the Volga river for the production of electrical power, and he was taken over the spot. "I am not one to be easily surprised by vast governmental power developments," he says, "but when it became clear that this one development, if completed, would produce twice as much power as all the T.V.A., the Grand Coule, and the Bomeville developments combined, I began to realise that the Russians dream and plan on a scale to fit their vast forests and plains."[4]

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[3] *Ibid*., p. 244.

A disadvantage of planning projects on a gigantic scale is that the difficulties of the period of transition are also on a correspondingly gigantic scale. And if the projects, in the end, fail to materialise, the waste is colossal.

2. BANK MONEY

The German experiment, which has been mentioned before, is doubly interesting. Planning in Russia was based on State ownership of means of production, or State capitalism. German planning is an example of State-controlled capitalism. The success of the German experiment shows that to use money for putting industry into motion a socialist revolution is not essential. It is sufficient if private interprise is rigidly controlled. Secondly, German reconstruction was financed by bank credit.

When reconstruction began in Germany, her economic situation was desperate. Between 1925 and 1932, while agricultural production had increased, agricultural income had fallen by one-third. Industrial unemployment had assumed gigantic proportions. And Germany had very little gold.

The entire economic life of Germany was reconstructed, unemployment was practically abolished and a huge programme of public works, not to speak of re-armament, was carried out by means of bills. The story is fascinating.

The control of production, prices and wages was an essential part of the German Four-Year Plan adopted in 1933. To help peasants, whose debts amounted to 11.4 milliard RM in 1932, taxes were lowered and farm relief organised. But the most important agricultural measures were those which ended the free play of supply and demand in the determination of prices.

The Law of 15th July, 1933 made provision for the compulsory cartellisation of agriculture (*Einrichtung von Zwangskartellen*). An Empire Food Organisation (*Reichsnaehrstand*) was established and agricultural chambers of commerce and other societies were linked with it. All growers and traders concerned with agricultural products were organised into associations. In 1934 a new organisation concerned with foodgrains was created (*Hauptvereinigung der deutsche Getreidewirtschaft*) which controlled the activities of 19 regional associations set up in the country. These associations were unions of businesses dealing in foodgrains from their production to sale in form of bread. Speculation was suppressed with a strong hand. Dr. Hoevel, writing in 1935, said:

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[4] *Cassel's* Indian edtion, p. 51.

" Prices are no longer determined by demand and supply but regulated by the State, and the whole German food economy is under the control of compulsory syndicates (*Zwangssyndikaten*)."[5]

Guillebaud notes that as a result of these measures " there was a great increase in the purchasing power of the agricultural section of the community, the net receipts of farmers rising from 300 million RM in 1932-33 to 2 milliard RM in 1934-35."[6]

A huge public works programme was undertaken to reduce unemployment. " *Woher kommt das Geld* " (Where does the money come from ?) asks Dr. Hoevel.

There were three ordinary sources of finance :

1. New savings.
2. Taxes.
3. The capital market.

The utilisation of these sources, says Dr. Hoevel, would not have led to the desired goal. The only way out was the expansion of credit (*Kreditausweiterung der einzige Weg.*)[7]

The State issued Treasury Bills (*Reichsschatzwechsel*) for which a maximum limit was fixed. These bills never appeared in the market, but only served as cover. New enterprises were financed through " employment bills " (*Arbeitbeschaffungswechsel*) put out by a special financing institution, *Deutsche Gesellschaft fuer Oeffentliche Arbeiten*, (*Oeffa* for short). These employment bills were discounted by the banks and re-discounted by the Reichsbank. The creation of credit instruments of an enormous amount, behind which there was no gold but only the credit of the State, was regarded with mistrust in wide circles. But Dr. Hoevel reminds the critics that the " Miracle of the Rentenmark " was at bottom nothing else except the creation of credit by the authority of the State. The security behind the Rentenmark was pure fiction (*eine reine Fiktion*), and yet the Rentenmark operated without friction. The miracle happened once more. The new money created enterprises, set people to work and raised wages and incomes.

The total capital investment during three years (1933-35) amounted to 17.5 milliard RM (=£875,000,000=1200 crore Rs.). Dr. Hoevel proceeds :—

" In itself the creation of credit through the creation of new purchasing power does not add to the existing supply of income-yielding property, or the supply of indirect or direct goods. But the expansion of credit has a capital-building effect as it enables the existing goods to be better utilised. And just this building of new capital makes it possible for the new credit to liquidate itself. When it is stated that captial represents past labour (*vorgetane Arbeit*), the converse is also true—credit creation represents future labour (*nachgetane Arbeit*)."[8]

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[5] *Grundfragen deutscher Wirtschaftspolitik* by Dr. Paul Hoevel Berlin, 1935, pp. 92-6.

[6] *Economic Recovery of Germany*, p. 59.

[7] Hoevel, *Loc. cit.*, p. 60.

Further, such creation of new purchasing power does not lead to the evils associated with inflation, as increase in the supply of money is balanced by increase in the volume of production. Dr. Hoevel continues :

"John Law's celebrated maximum: '*C' est au Souverain à donne le crédit et non à le recovoir*" leads to disaster, as credit expansion remains uncontrolled, and for that reason loses all relation to value creation. There is no risk of disaster when the amount of new purchasing power created is based upon and limited by the future production of goods."[9]

Again, in Germany, as in Russia, a considerable proportion of the new purchasing power in the form of bank credit was devoted to armaments. Real wages rose in Germany nevertheless, but the rise would have been greater if preparation for war had not been one of the principal objectives of German reconstruction.

The remarkable thing about German reconstruction is the complete absence of any inflationary rise of prices. As compared with 1929 = 100, wholesale prices rose from 70.3 in 1932 to 77.1 in 1938. During the same period wholesale prices rose from 68.0 to 82.5 in the United States, and from 74.9 to 83.8 in the United Kingdom (1929 = 100 in both cases). The cost of living rose from 78.3 in 1932 to 81.6 in 1938 in Germany; from 79.7 to 82.3 in the United States, and from 87.8 to 94.1 in the United Kingdom in the same period. These figures do not suggest the slightest trace of any inflationary price movement in Germany.

From 45 milliard RM in 1932-33 national income rose to 68 milliard RM in 1937-38 ; the gross revenue of the Government during the same period rose from about 66½ milliard RM to 135 milliard; the general index of production rose from 100 in 1932 to 220.6 in June 1937, and the number of the employed increased from 12.49 millions in 1932 to 18.50 millions in 1937. According to the *Statistical Year Book of the League of Nations* the number of the registered unemployed fell from 5.58 millions in 1932 to 0.91 million in 1937 and to 0.09 million in 1939.

This remarkable progress was achieved with increase in note circulation from 3,560 million RM in 1932 to 5,493 millions in 1937, an increase of 54.2 per cent. The increase is not remarkable, considering that during the same period the note circulation increased in the United Kingdom by 35.3 per cent and in the United States by 59 per cent.

German economy was re-constructed, not through the agency of notes but bills.

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[8] Hoevel, *Loc., Cit.,* p. 64.

[9] *Ibid* ; p. 65.

Between 1932 and 1937 the total of bills held by the Reichsbank and discounts by commercial banks rose from 6,156 millions RM to 13,849 millions. Of special significance are figures of discounts by commercial banks. These rose from 3,349 million RM in 1932 to 7,717 million RM in 1937, an increase of 130.4 per cent. The amount of gold and foreign exchange held by the Reichsbank in 1937 was less than £4,000,000. The role of gold in Germany recovery was of no importance.

It is obvious that when gold and foreign exchange reserves are practically negligible, foreign trade must be stringently controlled. The regulation of exchange transactions takes the form of "restriction," not "intervention." The various methods of trade and exchange control, including bilateral trade, clearing and payments agreements are already known to the reader.

Planned money will do wonders, but only under certain conditions. The individual loses his economic freedom more or less completely. He may choose his own occupation, but wages are fixed by the State. In certain cases, where rationing of technical skill is essential, certain classes of workers may be conscripted and distributed by the State among the industries requiring them. But the State, by training labour, can also directly increase the supply of technical skill. Capital is privately owned, but profits are controlled, and investment is directed by the State. Consumption is free, but not in the sense of consumer's sovereignty. In a planned economy there is only one Sovereign, the State which plans. The consumer may want finer varieties of cloth, shoes, and many other goods, but the State may say "No." The consumer may want imported luxuries, but the State may ban these imports, or, what amounts to the same thing, allocate no foreign exchange for the purpose. Given production control, price control, control of profits, interest, investment and wages, control of foreign trade and the strictest possible exchange control, bank credit may be used to create "full employment" without fear of inflation. This is not a theory, but a well-established fact.

Such is the financial mechanism of planning. Planned money, when it takes the form of planned bank credits, implies a reconstruction of the banking system. But it implies a good deal more besides. A complicated system of controls is set up, and the whole of economic life is regulated by the State.

While "created money" is mentioned in the well-known Memorandum on the Bombay Plan, its form has not been indicated. It is hoped that we shall choose bank credit instead of note currency. Ultimately the expansion of bank credit necessitates the expansion of the cash basis. But bank credit, in the words of Dr. Hoevel, represents *nachgetane arbeit*—work which is to be performed. When the work has been performed for which the requisite purchasing power was created, the liquidation of bank credit can begin. For example, batteries of tube-wells have to be sunk for irrigating new lands. Bank credit is credit created for the purpose in the form of bills, which are renewed again and again in the course of construction. When the work has been completed and irrigation begins, the bills can be gradually paid off with the income from the tube-wells in the shape of water-rates. In course of time the whole credit is liquidated, and the purchasing power which built the tube-wells is free to build something else. This is the difference between financing construction by means of bills, and by means of notes: in the latter case the currency remains in circulation, while, when bills are used, there is automatic retirement of purchasing power on the payment of the bills.

3. IS THIS A PERMANENT SYSTEM?

The question may be asked whether planned money is only a temporary expedient or has a permanent place in a country's economy.

Planned money is an integral part of a planned economy. There is no reason why planning should not be adopted as a permanent economic system.

In the beginning, when idle factors are to be drawn into employment, considerable amounts of purchasing power may have to be created periodically. As conditions of "full employment" are approximately realised, net investment would be reduced. Finally, net investment would have to be so maintained as to stabilize national income at the desired level. The community may choose more leisure instead of a higher real income in the form of goods and services.

Economic controls would have to be retained even after national income has been stabilized at a comfortable level. For the withdrawal of controls would mean that capital was free to make any profits, that saving and spending were the affair of private individuals, that capital might be invested as its owners decided. Such freedom would re-instate uncontrolled capitalism with all its attendant evils. The trade cycle has no place in a planned system; once the controls are removed and unlimited profits earned, and invested, production will again tend to outstrip consumption, giving rise to violent oscillations of the national income. An inestimable advantage of a planned economy is that production can be consciously and deliberately adjusted to consumption through the control of profits, interest, investment, and wages. The equality of savings and investment, by itself, is no guarantee of stability. When savings are equal to investment, a community's productive power may still be in excess of its purchasing power. If an outlet for surplus products is not found in backward countries, surplus capacity to produce will eventually be liquidated by a heavy fall of prices, or a crisis. Thorough-going State control of economic life is, perhaps, the only effective means of preventing the alternation of prosperity and depression which is such a characteristic feature of capitalism.

The inter-war period is full of lessons for those who are willing to learn. It shows an ever-widening sphere of Government intervention in trade, manufacture, currency and finance. This was not an accidental result, but simply the recognition of an economic necessity. The old economic order, whose praises were sung by the classical economists, has passed away. Sombart, the great German historian of capitalism, wrote sometime ago :

“ The present is characterised by planless control and regulation, as the past was by planless freedom and individual choice ; the future will be characterised by planned development of the economic system.”[10]

After all, there is not much to choose, so far as the freedom of the individual is concerned, between the system of planless checks evolved in the inter-war period and full-scale planning. The transition from planless control and regulation to planned development of the economic system is natural and inevitable.

It may be argued that the determination of rates of profit, interest and wages in a planned system would be arbitrary. Let that be so. These rates are not rationally determined under free competition either, unless the reader takes the view that all values under free competition are *ipso facto* rational. Let us take wages as an example. At the moment of writing an all-India postal and telegraph strike is threatened. We very narrowly escaped an all-India railway strike, which would have plunged the whole economic life of the country into confusion, apart from intensifying the danger of famine in scarcity areas. Is it rational to let labour and its employers fight it out whenever a difference arises between the two regarding the rate of wages ? No rate of wages is rational in itself. Under given conditions, having regard to the efficiency and supply of labour, the general levels of wages and incomes in the country, and the profit-earning capacity of the industry, a certain rate of wages can be paid. For the same kind of work wages may be higher in one country than in another. Who is to decide the appropriate level in any particular case ? The best judge is not the employer, obsessed with the fear that a rise of wages will cut into his profits, and not the worker who does not hesitate to practise black-mail to gain his ends. The matter must be left to an impartial tribunal. There were no strikes and lock-outs before the second world war in several countries, including Australia and New Zealand, and there were no strikes and lock-outs in the United Kingdom during the war. In the course of a debate in the House of Commons on November 27, 1940, Mr. Bevin, Minister for Labour, said : “ The Government had succeeded in settling a problem in industry that had baffled everyone for generations, namely to put the wages in the tool-room right and to get skilled men in right places.” A war economy is a planned economy. If wages in the tool-room can be put right during a war, why can that not be done also in peace-time ? The idea that labour has the right to fight capital for higher wages, whatever the fight may cost the community, is nonsensical. One can understand class-war to expropriate the expropriators and to establish a classless society (Marxist utopia). But where means of production are privately owned, wages, interest and profits must be regulated by the State in the over-riding interests of the community as a whole.

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[10] *Zukunft des Kapitalismus*, p. 158.

Put briefly, the argument for a planned economy is that it is an effective means of bringing about " full employment " of a community's human and material resources, of realising the ideal of economic justice between man and man, and last, but not least, of ensuring stability and avoiding violent oscillations of income.

Planned money has, therefore, a permanent place in a planned economy erected on a permanent footing.

4. PLANNED MONEY AND THE WORLD ECONOMY

Colbert and other French Mercantilists were familiar with the social function of money as a mobilizing agent, and they used gold and silver for that purpose. But France had need of other countries; gold and silver can only be attracted by means of surplus exports.

And they will go out when their quantity in a country, as Adam Smith argued, exceeds the effectual demand for them. Bullion contains great value in small bulk, which facilitates its smuggling in and out of a country. Apart from illegal exportation, if heavy imports lead to a considerable rise of prices, exports of goods will be penalized and imports subsidized, and the balance of trade and the rate of foreign exchange will turn against the country, causing exports of bullion.

When paper money replaces bullion as the mobilizing agent, a country may, under favourable conditions, become largely self-sufficient, or autark.

There is no need for attracting gold and silver from other countries by means of surplus exports. That does not mean that in a planned system there is no trade with the outside world. There will always be some demand for a country's goods and services in foreign countries. These exports may be used to pay for necessary imports. That is all the importance of foreign commerce in planning. For the development of powers of production and growth of natonal income and prosperity, reliance is placed mainly on the home and not foreign demand.

It is obvious that planning can be undertaken with a greater chance of success in a large country, with a dense population, than in a small country, the development of whose productive power must be dependent on the growth of demand elsewhere.

We are fortunately placed in this respect.

Nearly 300 B.C. Megasthenes wrote that India " has underground numerous veins of all sorts of metals, for it contains much gold and silver and copper and iron in no small quantity, and even tin and other metals which are employed in making articles of use and ornament as well as the implements and accoutrements of War."

Writing in 1881 in the introduction to his "*Economic Geology of India*," V. Ball thus commented on the passage quoted above :—

"To many it may appear that it was a fanciful and fabulous India, very different from the country as it is now known to us. To such the facts set forth in this work not only as to the extent of the mineral resources, but also as to the extent of the ancient mining operations, will come almost as a revelation.

"Speaking generally, the value of the majority of the deposits is relative to external circumstances. Were India wholly isolated from the rest of the world, or were her mineral productions protected from competition, there cannot be the least doubt that she would be able, from within her own boundaries, to supply very nearly all the requirements, in so far as the mineral world is concerned, of a highly civilized community. But the consumer would probably have to pay more than he does at the present day."

The extent to which India can become self-sufficient can be determined only by a detailed inquiry into her mineral and agricultural resources by an expert body. But it may be assumed that there is very great scope for the expansion of both our agricultural and industrial output. Our large population represents an enormous potential demand for all kinds of consumers' goods—that is not to say that a continued increase in population at the rate of the past 25 years is at all desirable. Even if the population of India became stationary at the present level, which is devoutly to be wished for, 400 millions of people, half-fed, inadequately clothed, and badly housed, will consume all that planning can produce on fields and farms and in factories, provided their purchasing power increased. The advantage of a planned system, which can create additional purchasing power at will, is that economic advance is rendered independent of occurrences in the outside world. Investment can be so regulated that employment increases steadily, wages can be appropriately adjusted by authority, and the tax-system used to make the distribution of wealth less unequal.

It follows as a matter of course that a planned economy cannot tie itself to the chariot wheels of world economy. Various controls, particularly State control of foreign trade and exchange control, erect a barrier between a planned economy and the rest of the world, so that fluctuations of prices, wages and incomes in other countries have no repercussions on the planned system. Planning is an effective safeguard against booms and slumps elsewhere. During the worst period of the Great Depression production continued to mount steadily in Soviet Russia.

If planning is undertaken in India, we shall have to reconsider our attitude towards the International Monetary Fund and the International Trade Organisation. The assumption of all international organisations is that nations are members of one another, but international schemes may be so worked as to benefit certain nations at the cost of others. An International Investment Bank may bring about a world-wide dispersal of American gold. But a planned economy can get along without gold. The International Monetary Fund is meant to avoid competitive currency depreciation and exchange discrimination, and eventually to restore the old regime of fixed gold parities. A planned economy may have to use all the devices of exchange control to reduce its obligations to the external world. The object of the International Trade Organisation is to bring about freer trade. Exports and imports in a planned economy can never be free, but non-discrimination is possible. What deserves to be emphasised is that a planned economy can undertake international obligations in the matter of trade, currency and exchange only within the rigid framework of planning. As soon as planning begins a country ceases to belong to the comity of nations which are " members of one another."

5. THE POLITICAL FRAMEWORK OF PLANNING

The financial implications of planning should be clear to the reader. The political framework of planning remains to consider. A brief reference to this subject is not out of place at a time when constitution making is in progress in our country.

Can planning be democratic ?

The question has been widely debated. The late Sir Basil Blackett, who was for some time Finance Member of the Government of India, in the course of his Halley Stewart Lecture, delivered in 1931, said :

" I wish to put before you this evening the view that conscious deliberate planning is not only a desirable means of progress, but an unavoidable necessity if we are to save the economic structure of of modern civilisation from disaster, and that the immediate task to which we should bend all our energies is to prove to ourselves and to the world that planning is consistent with freedom and freedom with planning."

The socialists are in power in Britain, and they may plan for Britain within the frame-work of British democracy. But there is an essential condition for successful planning under a two-party system. The fundamentals of the Plan which the Socialist Government may devise must be sincerely and whole-heartedly accepted by the Conservative Opposition.

Discussing " Freedom under Planning " in a recent publication Barbara Wooton says :

" I come now to political freedom. Once more we must begin by facing the issues. It has often been said that you cannot have effective economic planning if there is more than one political party. And once more example is no comfort, for the only example that we have of comprehensive economic planning is a one-party State. Is the abolition of party politics necessary for economic planning? I do not think it is. But those who hold a different opinion are, nevertheless, posing a real problem. For we cannot, by definition, make a continuous long-term plan for, say, five years, and still change our minds every six months. If the existence of political parties does mean the right to change our minds about everything every six months, then I am afraid it is incompatible with long-term planning." [11]

"Experience," as Barbara Wooton says, "is no comfort" because German democracy, as every one knows, was no democracy at all, and Russian democracy, while it is the greatest democracy in the world, as the communists all over the world are never tired of telling us, is, in practice, one-party system of government. There is no difference between democracy in Russia, and democracy in Germany and Italy before the second world-war. Opposition in all these countries met the same fate, and its bloodiest fate was in Russia.

It is also clear that if political parties keep changing their minds about everything every six months, no long-term plan can ever materialise. But if there is agreement between the party in Power and the Opposition about the fundamentals of a Plan, then long-range planning is conceivable under a two-party system of Government. The Opposition will then not seek to wreck the Government Plan but to improve it.

The democracy that we have in mind in this discussion is not our own wonderful democracy, organised on a religious and even caste-basis, but a well-disciplined and enlightened democracy, supported by a great national tradition, like the British.

Democracy in India is a total failure. The worst feature of our democracy is the type of leader and legislator it brings to the fore-front. Planning is government by experts, not by ignorant demagogues and tub-thumpers. British democracy may be able to plan, not Indian democracy, which is a joke and a fraud.

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[11] *Can Planning be Democratic*, a joint-work issued by the Fabian Society, 1944, p. 49.

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